

**Syllabus and Scheme of Examination**  
*for*  
**MASTER OF BUSINESS ADMINISTRATION**  
**(EXECUTIVE)**



**DELHI SCHOOL OF MANAGEMENT**  
**DELHI TECHNOLOGICAL UNIVERSITY**  
**(Formerly Delhi College of Engineering)**  
**Shahbad Daultpur, Bawana Road, Delhi -110042**

**(proposed to be effective from AY 2025-26)**

# **Contents**

<b>Particulars</b>	<b>Page No.</b>
Vision of Delhi School of Management	3
About the department	4
About the program	5
Program Educational Objectives and Program Outcomes	6-8
MBA Syllabus revision process	9
Detail of Credit Distribution	10
Semester Wise Scheme of the Programme	11-15
First Semester: (Course Objectives, Learning Outcomes, Contents and Suggested Reference of Core Papers/ Lab/Workshops)	16-26
Second Semester: (Course Objectives, Learning Outcomes, Contents and Suggested Reference of Core Papers/ Lab/Workshops)	27-36
Third Semester: (Course Objectives, Learning Outcomes, Contents and Suggested Reference of Core Papers/ Lab/Workshops)	37-42
Fourth Semester: (Course Objectives, Learning Outcomes, Contents and Suggested Reference of Core Papers/ Lab/Workshops)	43-48
List of electives	48-52
Detailed Content of list of electives	53-170



## **Vision**

To be among the leading world class management education and research institutions for meeting the contemporary and emerging challenges of business and society.

## **Mission**

M1. To develop socially responsible and ethically driven innovative managers and future leaders.

M2. To evolve a system of quality education and research in management through sustained institutionalized efforts of students and faculty.

M3. To equip the students with contemporary and emerging developments in the field of management.

## **About the department**

Delhi School of Management (DSM), established in 2009, extends the legacy of Delhi College of Engineering (DCE) by fostering innovation and excellence in management education. DSM offers a comprehensive suite of programs including Master of Business Administration (MBA), MBA (Business Analytics), MBA (Entrepreneurship, Innovation, and Venture Development), MBA (Executive) and Ph.D. programs. Accredited by NBA, DSM supports DTU's engineering departments and provides a state-of-the-art learning environment with industry-driven curricula, internships, and networking opportunities. Emphasizing entrepreneurship, ethical leadership, and experiential learning, DSM integrates guest lectures, field projects, and live case studies into its pedagogy. A vibrant campus life enriched with business quizzes, debates, cultural activities, and sports events fosters holistic development. With a diverse student body, experienced faculty, and ever-expanding facilities, DSM continues to develop socially responsible, technologically adept leaders equipped for sustainable business solutions.

## **About the program**

### **Masters of Business Administration (Executive)**

We live in a rapidly changing and highly unpredictable environment fueled by rapid economic, technological and social changes. Today, organizations require leaders and managers who possess extensive experience and skills to tackle challenges and uncertainties. The MBA (Executive) program is specifically designed to create future-ready leaders with a creative and strategic mindset to thrive in the dynamic business world. The program is designed for experienced professionals who want to improve their business acumen and skillsets. It will help in developing industry leaders who are capable of driving change, creating value and inspiring others.

## **Program Educational Objectives (PEOs)**

PEO 1: To develop effective communication, interpersonal, motivational and leadership skills to work in multi-disciplinary teams.

PEO 2: To apply business concepts to managerial decision making in variety of complex business situations.

PEO 3: To develop a systematic understanding of globalization and its impact on people, businesses and the economy.

PEO 4: An ability to use current techniques, skills, and tools necessary for managerial practice.

PEO 5: Students will be able to develop business strategies that serve the long-term interests of a firm.

PEO 6: To inculcate value-based leadership, ethical qualities and a sense of social purpose among MBA (Executive) students.

## **Program Outcomes (POs)**

The MBA (Executive) Student will be:

- Able to develop business writing and deliver a professional, individual or group oral presentations.
- Able to identify, assess and evaluate alternatives managerial decisions.
- Demonstrate an understanding of how global competitive environments are changing business practice and able to identify and evaluate potential market opportunities.
- Possessing the ability to select and apply appropriate managerial and technical tools.
- Able to develop innovative business strategies to serve long term interest of a firm.
- Aware and sensitive to societal concerns and work towards development of sustainable solutions to problems at large.

## **Program Specific Outcomes (PSOs)**

The MBA (Executive) student will be:

- Specialize in both technical and functional areas.
- Possess ability to make effective managerial decisions utilizing business concepts and managerial tools.

**Definition of key words**

(a) In this document, unless the contents otherwise require—

- (i) “AC” and “Council” shall mean the Academic Council of the Delhi Technological University.
- (ii) “BoM” shall mean the Board of Management of the University.
- (iii) “BoS” shall mean Board of Studies of the Department/School.
- (iv) “CGPA” shall mean the Cumulative Grade Point Average.
- (v) Department shall mean a department of studies of the university.
- (vi) School shall mean a school of studies of the university.
- (vii) “SGPA” shall mean the Semester Grade Point Average.
- (viii) “Student” shall mean a student registered for undergraduate or post graduate program.
- (ix) “University” shall mean the Delhi Technological University.
- (x) “UTTC” shall mean University Time Table Committee.

(b) Words and expressions used but not defined in this document and defined in the Act and Statutes, shall have the same meaning as assigned to them in the Act or Statute.

## **Pedagogical Notes**

- Case study approach as a critical learning tool will be thoroughly used to enhance the student abilities in delineating critical thinking dilemmas faced by organizations, help them in applying concepts and solve practical problems.
- Predictive and real-life exposure will be provided to the students at all levels.
- In addition to the focus on the corporate sector, exposure to the social sectors and public policy issues will be suitably incorporated in the delivery of the curriculum.
- Students will be trained in innovative and out-of-box thinking in various courses to meet workplace challenges in the VUCA world.
- The whole curriculum will be delivered in the ethical contexts and will emphasize human values.
- Entrepreneurial thinking will be promoted in the delivery of various courses.
- The delivery will incorporate global contexts for wider perspectives and thinking.
- The overall delivery will to provide an integrated and holistic foundation of the different fields of business management with a clear focus on problem-solving.
- Throughout the curriculum delivery, the emphasis will be on developing leadership skills through practical exercises.
- Successful Indian business models will be shared with students in different courses.
- Contemporary pedagogical tools like Moderator-Supported Learner Approaches, Simulation Exercises and Crossword Play will be used to enhance learning experience.
- The learning pedagogy will be complemented with self-learning tools such as poster sessions, break-and- build and free-fall learning and innovative business education methods including design thinking, project- based learning, contemplative practices, assumption-busting and theatre techniques to deepen learning.



## **Process Followed in the Revision of the Syllabus**

### **Stage-I**

Formation of a core committee for Course Revision comprising of senior faculty members of the department with an objective to generate ideas and inputs and provide direction for the revision of the structure, credits and contents etc.

### **Stage-II**

Discussions with area Wise Working Groups with a purpose to provide domain specific input under their respective areas

### **Stage-III**

Feedback from the alumni and students

### **Stage-IV**

Revision of framework based on the feedback.

### **Stage-V**

Approval by Board of Studies

### **Stage-VI**

Proposal for the Approval of Academic Council

### Detail of Credit Distribution

<b>Semester</b>	<b>Core Courses (CC)</b>	<b>Discipline Specific Courses (DSE)</b>	<b>Skill Enhancement Courses (SEC)</b>	<b>Value Added Courses (VAC)</b>	<b>Research Project</b>
I	18		2		
II	15		3	2	
III	6	12	3	2	
IV	6	12	3		6
Total	45	24	11	4	6
	TOTAL - 90 credits				

## FIRST SEMESTER

S. No	Course			Credits	Contact Hours			Exam Duration (Hrs.)		Relative Weights		
	Code	Title	Discipline		L	T	P	ETE	PRE	CWS	MTE	ETE
1		Organizational Behavior and Human Resource Management	CC	3	3	0	0	3	0	25	25	50
2		Managerial Economics	CC	3	3	0	0	3	0	25	25	50
3		Financial and Cost Accounting	CC	3	3	0	0	3	0	25	25	50
4		Marketing Management	CC	3	3	0	0	3	0	25	25	50
5		Perspectives in Business Law	CC	3	3	0	0	3	0	25	25	50
6		Decision Sciences	CC	3	3	0	0	3	0	25	25	50
7		Managerial Skill Development	SEC	2	2	0	0	-	2	0	0	0
		TOTAL		20	20	0	0	18		150	150	300

## SECOND SEMESTER

S. No	Course			Credits	Contacts Hours			Exam Duration (Hrs.)		Relative Weights			
	Code	Title	Discipline		L	T	P	ETE	PRE	CWS	PRS	MTE	ETE
1		Business Policy and Strategy	CC	3	3	0	0	3	0	25	0	25	50
2		Business Research Methods	CC	3	3	0	0	3	0	25	0	25	50
3		Financial Management	CC	3	3	0	0	3	0	25	0	25	50
4		Operations and Supply Chain Management	CC	3	3	0	0	3	0	25	0	25	50
5		AI Applications in Business	CC	3	3	0	0	3	0	25	0	25	50
6		Design Thinking	SEC	3	3	0	0	3	0	25	0	25	50
7		Managing Happiness	VAC	2	2	0	0	0	2	0	0	50	
		TOTAL		20	20	0	0	18	2	150	0	200	300

### THIRD SEMESTER

S. No	Course							Credits	Contact Hours		Exam Duration (Hrs.)		Relative Weights	
	Cod e	Title	Disc iplin e		L	T	P	ETE	PRE	CW S	PRS	MT E	ETE	
1		Bu sin ess An alyt ics	CC	3	3	0	0	3	0	25	0	25	50	
2		Pro ject Ma nag em ent	CC	3	3	0	0	3	0	25	0	25	50	
3		Spe cial izat ion Ele ctiv e X	DSE	3	3	0	0	3	0	25	0	25	50	
4		Spe cial izat ion Ele ctiv e X	DSE	3	3	0	0	3	0	25	0	25	50	
5		Spe cial izat ion Ele ctiv e X	DSE	3	3	0	0	3	0	25	0	25	50	
6		Spe cial izat	DSE	3	3	0	0	3	0	25	0	25	50	

		ion Ele ctiv e X											
7		Ind ian Kn owl edg e Sys tem and Pro fes sio nal Eth ics	VAC	2	2	0	0	2	0	25	0	25	50
8		Ex ecu tive Lea der shi p Ev alu atio n Sta ge- 1	SEC	3	0	0	0	0	0	0	0	0	0
		TOT AL		23	20	0	0	20	0	175	0	175	350

## FOURTH SEMESTER

S. No	Course			Credits	Contact Hours			Exam Duration (Hrs.)		Relative Weights			
	Code	Title	Discipline		L	T	P	ETE	PRE	CWS	PRS	MTE	ETE
1		Leadership and Change Management	CC	3	3	0	0	3	0	25	0	25	50
2		ESG and Sustainability	CC	3	3	0	0	3	0	25	0	25	50
3		Specialization Elective-X	DSE	3	3	0	0	3	0	25	0	25	50
4		Specialization Elective-X	DSE	3	3	0	0	3	0	25	0	25	50
5		Specialization Elective-X	DSE	3	3	0	0	3	0	25	0	25	50
6		Specialization Elective-X	DSE	3	3	0	0	3	0	25	0	25	50
7		Major Research Project	P	6	0	0	0	0	0	0	50	0	0
8		Executive Leadership Evaluation	SEC	3	0	0	0	0	0	0	0	0	0
		TOTAL		27	18	0	0	18	0	150	50	150	300

**Note:**

1. After completion of first year courses successfully, the student will get Post Graduate Diploma in Business Management on exit from the program.
2. A student is allowed to earn a maximum of 18 credits from the MOOCs/NPTEL against the elective courses in III and IV semesters. The list of such courses shall be made available at the beginning of the semester before registration.
3. The Research Project is required to be done individually under one internal and one external mentor. A maximum of five students will be allocated to each team of internal/external mentors. The honorarium to mentors shall be paid as per the University norms.
4. Students must attend a minimum number of activities/sessions and the defined evaluation process for each course to be conducted under Managerial Skill Development and Executive Leadership Evaluation Stage I/II. The detail of such activities will be shared at the beginning of the semester by concerned faculty members.
5. Specialization/electives will be offered based on the choice of students. However, as per the policy, a particular specialization/elective will be offered only when the required minimum numbers of students register for the course. The department may also restrict some of the combinations of specialization/electives keeping in view the industry trend, job opportunities, slots available in the time table and students' preferences.





**Course Objectives, Learning Outcomes, Contents**  
**and Suggested Reference of Core Papers/**  
**Lab/Workshops**

**FIRST SEMESTER**

**Organizational Behavior and Human Resource Management**

Credit- 3

**Course Objectives:**

1. To understand leadership and how to be an effective leader and differentiate between leadership, power, and management.
2. To learn individual and group behavior, communication, conflict various management styles, motivational techniques, and coordination in the work environment.
3. To critically assess existing theory and practice in the field of HRM.
4. To evaluate HRM-related social, cultural, ethical, and environmental responsibilities and issues.
5. To understand human resource skills and the ability to assess the challenges and opportunities in managing employees in different contexts.
6. To understand the responsibilities of HRM specialists and managers in managing the employment relationship.

**Course Outcomes:**

Upon successful completion of the course, the student should be able to:

1. Evaluate ethical issues related to organizational behavior and challenges of effective organizational communication.
2. Assess the impact of culture on organizational behavior.
3. Understand basic concepts, functions, and processes of human resource management.
4. Examine the role, functions, and functioning of the human resource department of an organization.
5. Respond positively to problems in familiar and unfamiliar contexts in the field of Human Resource management.
6. Identify and apply new ideas, methods, and ways of thinking to enhance effectiveness in employee performance.

**Unit 1: Organization Behavior: An Introduction, Behavioral Dynamics**

Foundations of individual behavior, Personality, Perception, Learning, Values, Attitudes, Motivation, Interpersonal Dynamics, Teamwork and Group Dynamics; Leadership theories and styles. Management of conflict and negotiation.

**Unit 2: Organizational Culture and Change**

Organizational culture, Organizational change: nature and forces of change, resistance to change: and management of resistance to change; organizational power and politics; toxic workplace; workplace diversity; and Work stress: sources and consequences of stress and its management.

**Unit 3: Human Resource Management- concept**

The Role of Human Resource Management in a competitive business environment; Strategic Human Resource Management, Creating high-performance work systems, Practices and applications of HRM, International Human Resources Management.

**Unit 4: Human Resource planning & selection**

Objectives, Importance & Problems of HR Planning; Job analysis – concept and Techniques, Job Description, The process of forecasting- concept, techniques, Human Resource Auditing, Human

Resource Accounting. Concept, identifying job recruitments, recruitment resources, and efficacy. Selection, process, and methods.

### **Unit 5: Training and Development**

Training and development concept, need, strategy, Identification of needs, designing and implementing training programs Management Development, Evaluation of Training & development

### **Unit 6: Performance and Compensation Management**

Performance Management – Concept and Practices Principle and Objectives of Performance Appraisal and potential Evaluation, Feedback. Career planning, Succession Planning & Talent Management. Compensation Management, Job Evaluation, Transfer, Promotion and Reward Policies.

### **Unit 7: Industrial Relations**

Definition, concept, context of Industrial Relations, new wage codes, Discipline (Red hot stove principle of discipline, counseling, collective bargaining, Quality of work life; Safety and Health, Employee Welfare, Employee Assistance Programmed, Separation, Attrition.

#### **Text Books:**

- Robbins, S.P., Judge, T.A., Edwards, M., Sandiford, P., Fitzgerald, M., & Hunt, J. (2019) Organisational Behaviour, 9th Edition, Melbourne: Pearson
- Nahavandi, A., Denhardt R. B., Denhardt, J. V., Aristigueta M. P. (2015), Organizational Behavior, Sage Publications.
- Dessler, G. & Varkkey B., (2015), Human Resource Management, 14/e, Pearson Education.
- Denisi, A., Griffin, R. and Sarkar, A. (2014), HR, Cengage Learning (India Edition)

#### **Reference Books:**

- Greenberg, J. and Baron, R.A. (2015), Behaviour in Organization, Pearson Education.
- Newstrom, J.W. & Davis, K (2014), Organizational Behaviour at Work, Tata Mc GrawHill.
- DeCenzo, D. A. and Robbins, S. P. (10th ed., 2011). Fundamentals of Human Resource Management. John Wiley.
- Torrington et al (2014), Human Resource Management 9/e, Pearson Education.

#### **Suggested Readings:**

- Lepak, D. & Gowan M. (2009), Human Resource Management, Pearson Education.
- Ivancevich, J.M. (2014), Human Resource Management, 10/e, Tata Mc Graw Hill.
- Byars, L.L. & Rue, L.W. (2014), Human Resource Management, 10/e, Tata Mc Graw Hill.
- George, J. M. & Jones, G.R. (2012), Understanding and Managing Organizational Behaviour 6/e, Pearson Education.
- Nelson D.L., Quick, J.C. & Khandelwal, P. (2014), ORGB, 2/e, Cengage Learning

## **Managerial Economics**

**Credits- 3**

### **Course Objective:**

1. To familiarize students with the concepts and techniques used in economics, and to develop managerial capabilities for effective decision-making.
2. To develop critical thinking and analytical skills for effective decision-making in varied business situations and market conditions.
3. To better understand the linkages between Economics and the nuances in different functional areas of management.

### **Course Outcomes:**

1. Understanding the role of scarcity in making economic choices
2. Apply demand and supply function in understanding market behaviour and consumers
3. Understanding the production problem and how managers make input purchase decisions
4. Relating different market structures with pricing decisions
5. Understanding the external environment, common information problems faced by managers

### **Unit 1: Introduction**

Introduction to Managerial Economics: Meaning, Significance, Decisions of Business Firms under Different Objectives, Resources and Constraints: Economic Choices

### **Unit 2: Demand and Supply Analysis**

Concept of Demand and Supply, Factors affecting demand, Demand function, Factors affecting supply, Supply function, Elasticity of demand, Demand Forecasting; Theory of Consumer Behaviour, Utility analysis: Managerial Applications

### **Unit 3: Production and Cost**

Production functions, Law of Variable Proportions, Laws of Returns to Scale, Economies and Diseconomies of scale, Equilibrium of the firm; Cost function: Theory of Costs, Short Run and Long run costs; Revenue Functions: Total, Average and Marginal Revenue, Break-even Analysis

### **Unit 4: Market Structure and Pricing Strategies**

Profit Maximization under Different Market Structures - Perfect competition, Monopoly, Price Discrimination, Monopolistic Competition, Oligopoly, Externality, Public Goods.

### **Text Books:**

- Pindyck, Rubinfeld and Mehta (2009). Micro Economics (7th Edition). Pearson
- Geetika, Ghosh P., & Roy Chowdhury, P. (2017). Managerial Economics (3rd ed.). McGraw Hill Education.

### **Reference Books:**

- Allen, W. B., Doherty N. A., Weigelt, K., & Mansfield E. (2009). *Managerial Economics: Theory, Applications and Cases* (7th ed.). W. W. Norton & Company

- Bernheim, B. D., Winston, M., & Sen, A. (2008). Microeconomics. McGraw Hill Education.
- Hirschey, M. (2009). Managerial Economics: An Integrative Approach. Cengage Learning.
- Koutsoyiannis, A. (2008). Modern Microeconomics (2nd ed.). Palgrave, McMillan.
- Salvatore, D. (2009). Principles of Microeconomics (5th ed.). Oxford University Press
- Paul, K., Philip, K. Y., Steve, E., Dickinson, C., & Banerjee S. (2017). Managerial Economics (7th ed.). Pearson
- Thomas C. R., & Maurice, S.C. (2010). Managerial Economics: Foundations of Business Analysis and Strategy (10th ed.). McGraw Hill Education
- Varian, H. R. (2010). Intermediate Microeconomics (8th ed.). East-West Press Pvt. Ltd.
- GS Gupta, GS. (2011). Managerial Economics. Tata McGraw Hill

## **Financial and Cost Accounting**

**Credit – 3**

### **Course Objectives:**

1. Understand the theoretical and practical aspects of accounting for decision making.
2. Describe concepts and principles used to produce financial statements.
3. Interpret four basic financial statements: balance sheet, income statement, statement of retained earnings and cash flow statement.
4. Identify major differences between financial accounting and cost accounting.

### **Course Outcomes:**

Upon successful completion of the course the student should be able to:

1. Apply accounting concepts, principles and conventions in examining financial statements and understanding how accounting decisions affect real company practices.
2. Analyse, interpret and communicate the information contained in basic financial statements.
3. Understand the concepts and classifications of costs and their relevance to managerial decision-making.
4. Conduct cost-volume-profit (CVP) analysis to evaluate business operations and make pricing and production decisions.

### **Unit 1: Introduction**

Introduction to Accounting: Importance, Accounting Concepts and conventions, (GAAP), Accounting Standards (Focus on importance of Standards to give a general view on Financial Reporting Practices and also special focus on AS related to Inventory, Depreciation, Fixed assets and Revenue recognition).

### **Unit 2: Accounting Process**

Accounting Process - Books of Original Record. Ledger & Trial Balance, Classification of Capital and Revenue expenses, Concepts and contents of financial statements and drafting of Financial Statements.

**Unit 3: Financial Statement Analysis**

Users of financial statement, Techniques of analysis and interpretation of financial statements: Ratio Analysis; Liquidity, Leverage, Solvency and Profitability ratios – Du Pont Chart -. Horizontal Analysis and Vertical Analysis, statement of changes in Financial position: Cash flow statement, Working capital changes.

**Unit 4: Concepts and Elements of Cost**

Cost classification and Behaviour, preparation of Cost sheet

**Unit 5: Relevant Costing for Decision-Making**

Cost-Volume-Profit (CVP) Analysis, Make-or-buy decisions, product discontinuation, and special order decisions, Sunk costs and opportunity costs

**Text Books:**

- R. Narayanswamy , Financial accounting: A Managerial Perspective, PHI
- Horngren, T. C., Datar, S. M., Foster, G., Rajan, M. V., & Ittner, C. (latest Edition).
- Cost Accounting: A Managerial Emphasis (13thed.). New Delhi: Prentice Hall of India.

**Reference Book:**

- Robert N. Anthony, Essentials of Financial accounting, Prentice Hall.

## **Marketing Management**

**Credit – 3****Course Objective:**

1. To develop an understanding of the underlying concepts, strategies and the issues involved in managing the marketing efforts of a firm.
2. To analyze the role and application of marketing within the firm and society.
3. To study the four basic variables of marketing: product, price, place and promotion.
4. To understand the emerging paradigms in marketing management.

**Course Outcomes:**

Upon successful completion of the course the student should be able to:

1. Identify the roles and functions of marketing within a diverse range of organizations.
2. Develop key marketing concepts and techniques for the analysis of dynamic marketing environment.
3. Design the suitable marketing mix for an organization.
4. Formulate the effective marketing strategy framework for an organization.

**Unit 1: Introduction**

Introduction to marketing function; genesis, marketing mix concept, classification of goods and services, goods- service continuum. Concept of customer value, customer satisfaction and delight, Customer Engagement, Customer Journey and Customer Touch Points.

**Unit 2: Marketing Environment**

Analyzing needs and trends Macro Environment - Political, Economic, Socio-cultural, Legal, Ecological and Technical Environment – PEST analysis. Micro Environment – Industry & Competition. AI in marketing.

**Unit 3: Market Segmentation, Targeting and Positioning**

Definition, Need & Benefits. Bases for market segmentation of consumer goods. Segment, Niche & Local Marketing, Effective segmentation criteria, Evaluating & Selecting Target Markets, Concept of positioning – Value Proposition & USP.

**Unit 4: Product and Pricing Decisions**

Product Life Cycle concept, Branding decisions; packaging and labeling; new trends in packaging. Pricing objectives, Factors influencing pricing decision - approaches to pricing – Price & Non-price competition, contemporary pricing strategies.

**Unit 5: Distribution and Promotion Decisions**

Importance, functions of distribution channels - introduction to the various channels of distribution, designing marketing channels. Direct Marketing, Concept of Omni channel, and Impact of technology & Internet on distribution: Market place model, hyper local model. Promotional Mix - Advertising, Sales Promotion, Personal Selling and Public Relations. Concept of earned, owned and paid media.

**Text Books:**

- Kotler Philip, Keller Kevin Lane, Koshy Abraham and Jha Mithileshwar - Marketing Management: A South Asian Perspective (Pearson Education 14th Edition).
- Lamb CW, Hair JF, Sharma, D and McDaniel, C- MKTG-A South Asian Perspective, Cengage Publication.

**Reference Books:**

- William J - Fundamentals of Marketing (Mc Graw Hill)
- Ramaswamy V.S. and Namakumari S - Marketing Management: Planning, Implementation and Control (Macmillian, 3rd Edition).
- Etzel, M., Walker, B., Stanton, W. and Pandit, A (2009) Marketing Management, Tata McGrawHill, New Delhi.
- Mc. Carthy and Perreault -Basic Marketing: A Global Marketing Approach (Tata Mc Graw Hill, 15th Edition).
- Saxena, Rajan (2009), Marketing Management, Fourth Edition, Tata McGraw Hill Education Pvt. Ltd. New Delhi.

## **Perspectives in Business Law**

**Credits - 3**

**Course Objectives:**

1. This course aims to cover the principal laws impacting business.
2. To provide the students with an understanding about the basic nature of law and how it affects business decision making.
3. To provide students with increased knowledge concerning important legal issues in business.
4. To equip students to avoid the legal issues before they occur and control and manage legal problems.

### **Course Outcomes:**

On successful completion of the course the student will be able to:

1. Understand the legal framework within which the business organization operates.
2. Develop insight into the legal provisions and its consequences while making decisions.
3. Safeguard the interests of the business organization from a legal perspective.
4. Comprehend the larger role of business in society and the need to regulate it in order to ensure balance in stakeholder benefits.
5. Utilize the provisions of law to create - generate - realize wealth.

### **Unit 1: Introduction to Business Legislation**

Meaning and Nature of Law, Sources of Indian Law, Legal Environment of Business, Basic Legal Concepts, Essentials of Law, Indian Legal System, Overview of Indian Legal Framework: Introduction to key legislations

### **Unit 2: Indian Contract Act, 1872 and Sale of Goods Act, 1930**

Concept of Agreement and Contract, Formation and Essentials of a Valid Contract, Offer and Acceptance, Consideration, Discharge of Contract, Remedies for Breach of Contract  
Meaning and Essential Elements of a Contract of Sale, Meaning and Types of Goods, Conditions and Warranties (Express and Implied), Rights of the Unpaid Seller

### **Unit 3: Consumer Protection Act, 2019 and Competition Law**

Key Definitions: Consumer, Complainant, Goods, and Services, Consumer Disputes and Complaints Unfair and Restrictive Trade Practices, Rights of Consumers, Consumer Dispute Redressal Agencies, Competition Act, 2002  
Objectives of the Act, Anti-Competitive Agreements, Abuse of Dominant Position, Regulation of Combinations, Role of the Competition Commission of India (CCI)

### **Unit 4: Companies Act, 2013**

Introduction to Company Law, Meaning and Essential Features of a Company, Types of Companies, Formation and Incorporation of Companies, Key Company Documents, Memorandum of Association (MOA), Articles of Association (AOA), Prospectus, Company Management and Meetings, Directors: Roles, Responsibilities, and Independent Directors, Types of Company Meetings and Procedures

### **Textbooks:**

- Khuchhal and Khuchhal, *Business and Corporate Law* (2014), Vikas Publishing.



- Kapoor ND, *Business Laws* (2015), Sultan Chand and Sons.

#### **Reference Books:**

- Linda Thomas-Mobley, *Legal Concepts for Facility Managers*, Wiley Publications.
- Matthew Lippman, *Law and Society*, Sage Publishing.

## **Decision Sciences**

### **Credits - 3**

#### **Course Objective:**

To develop data analysis based decision making skills of students using application of quantitative methods

#### **Course Outcomes:**

Upon successful completion of the course the student should be able to:

1. Understand the role of statistics in management.
2. Understand the basic quantitative techniques and their applications in management.
3. Apply statistical techniques to present, analyze and interpret data for drawing meaningful inferences for decision making.
4. Identify real life business problems and transform them into appropriate quantitative models.

#### **Unit 1: Introduction**

Role of statistics in management, Graphical representation of data, Measures of central tendency and dispersion.

#### **Unit 2: Probability Distributions**

Introduction to probability theory, Probability distributions - continuous and discrete.

#### **Unit 3: Statistical estimation, hypothesis testing**

Sampling distributions, Point and interval estimation, Hypothesis testing: Z-test, test of proportions, t-test, ANOVA, Chi-square test, correlation and linear regression analysis.

#### **Unit 4: Operations Research**

Linear Programming: Formulation and applications, solution through graphical method and sensitivity analysis, Transportation and assignment problems, Monte Carlo Simulation- concepts and applications in business, Introduction to Queuing Theory.  
(The overall course delivery through lectures and practical exercises)

#### **Text Books:**

- Keller G. and Malhotra G.(2018). *Statistics for Management and Economics*, 11e, Cengage Learning.

- Aczel A., Sounderpandian J. and Saravanan P. (2017). Complete Business Statistics, 7e, Tata McGraw-Hill Education
- Stair R.M., Hanna M.E., Hale T.S. and Badri T.N. (2016). Quantitative Analysis for Management, 12e, Pearson.
- Vohra N.D. and Arrora H.(2021). Quantitative Techniques in Management, 6e, Tata McGraw Hill
- Publications.

#### **Reference Books:**

- Levine D.M. (2017). Statistics for Managers using Microsoft Excel, 8e, Pearson Education India.
- Hiller F.S., Lieberman G.J., Nag B. and Basu P. (2021). Introduction to Operations Research, 11e, Tata McGraw Hill Education.

## **Managerial Skill Development**

**Credits- 2**

#### **Course Objectives:**

1. To develop essential managerial skills for effective leadership, decision-making, and teamwork.
2. To enhance communication, negotiation, and conflict resolution abilities in professional settings.
3. To equip students with critical thinking and problem-solving techniques for managerial success.
4. To foster emotional intelligence, adaptability, and time management skills for personal and professional growth.

#### **Course Outcomes:**

On successful completion of the course, students will be able to:

1. Apply leadership and communication skills to manage teams and organizational tasks effectively.
2. Utilize problem-solving and critical thinking techniques to make informed business decisions.
3. Demonstrate negotiation, conflict resolution, and stress management skills in a professional environment.
4. Develop emotional intelligence and adaptability to thrive in dynamic business settings.

#### **Unit 1: Essential Managerial Skills and Leadership Development**

Introduction to Managerial Skills: Importance, Types, and Role in Business Success

Leadership and Decision-Making: Leadership Styles, Ethical Decision-Making, and Strategic Thinking, Communication for Managers: Verbal and Non-Verbal Communication, Effective Business Writing, and Presentation Skills, Team Management and Collaboration Building High-Performing Teams, Delegation, and Motivational Strategies, Emotional Intelligence in

Management: Understanding and Managing Emotions, Self-Awareness, and Empathy in Leadership

## **Unit 2: Problem-Solving, Negotiation, and Time Management**

Critical Thinking and Problem-Solving: Analytical Thinking, Creativity in Decision-Making, and Case-Based Problem Solving, Negotiation and Conflict Resolution: Principles of Negotiation, Conflict Management Strategies, and Real-World Case Studies, Time and Stress Management: Prioritization, Productivity Techniques, and Coping Strategies for Stress, Innovation and Change Management: Adapting to Change, Fostering Innovation, and Overcoming Resistance to Change, Personal Development and Career Growth: Self-Assessment, Goal Setting, and Continuous Learning for Professional Success

### **Text books:**

- Harold Koontz & Heinz Weihrich, Essentials of Management (Tata McGraw Hill)
- Stephen P. Robbins & Timothy A. Judge, Organizational Behavior (Pearson)

### **Reference Books:**

- Daniel Goleman, Emotional Intelligence (Bantam)
- Peter Drucker, The Effective Executive (Harper Business)
- Dale Carnegie, How to Win Friends and Influence People (Simon & Schuster)
- Covey Stephen R., The 7 Habits of Highly Effective People (Free Press)Business Process and Change Management



## **Course Objectives, Learning Outcomes, Contents and Suggested Reference of Core Papers/ Lab/Workshops**

# **SECOND SEMESTER**

### **Business Policy and Strategy**

**Credits- 3**

#### **Course Objectives:**

The primary objectives of the course are:

1. To introduce the concepts of strategic management and understand its nature in competitive and institutional landscape

2. To develop the knowledge about strategy making process that is informed, integrative and responsive to rapid changes in organization environment
3. To provide an underpinning of the strategy execution process, framework and its criticality.
4. To help students develop skills for applying these concepts to the solution of business problems.

### **Course Outcomes:**

Upon successful completion of this course students will be able to:

1. Evaluate macro-environmental and industry factors affecting profitability and positioning.
2. Analyze organizational performance to identify strategic capabilities and gaps.
3. Compare and formulate strategic choices for competitive advantage in global markets.
4. Develop and implement strategies to navigate complex and dynamic business environments.

### **Unit 1: Nature of Strategic Management**

Role and concept of Strategy, Mintzberg's 5Ps of Strategy, Strategic Decision Making, Strategic Management Process, Business Models, Strategic Fit, Stretch and; Leverage, Strategic Intent, Business ethics and strategic planning.

### **Unit 2: Environmental Analysis**

External Environmental Analysis: Constructing scenarios, Environmental scanning techniques, External Factor Evaluation (EFE) matrix, ETOP, Competitive Profile Matrix; Analysis of task environment; Analysis of internal environment– Resource Based View (RBV), Value chain analysis, Internal Factor Evaluation (IFE) Matrix.

### **Unit 3: Strategic Choices**

Strategic options at corporate level: Growth, stability and retrenchment strategies; Corporate restructuring; Strategic options at business level- Michael porters' competitive strategies and cooperative strategies. Evaluation of strategic alternatives – Product portfolio models (BCG matrix, GE Matrix, etc). Types of international Strategies, International entry options.

### **Unit 4: Situation Specific Strategies**

Strategies for situation like competing in emerging industries, maturing and declining Industries, fragmented industries, hyper –competitive industries and turbulent industries; Strategies for industry leaders, challengers, and runner-up firms. Strategic Planning under Unfavorable business environments.

### **Unit 5: Strategy Implementation and Evaluation**

Issues in strategy implementation- Resource Allocation, Structural Considerations and Organizational Design, Leadership and Corporate Culture, Operational Strategies, Budgets and support system commitment. etc. Mc kinsey's 7S Framework, Importance and Nature of Strategic Evaluation.

**Suggested Readings:**

- Wheelen, Thomas L., Hunger, J. David, Hoffman, Alan N and ; Charles, E. Bamford (2017). Strategic Management and Business Policy: Globalization, Innovation and Sustainability. Pearson.
- Hill, Charles W. L and Jones, R. G. (2012). Strategic Management: An Integrated Approach. Cengage Learning, India.
- Jersey Davidson, W. H. (2013). Global Strategic Management. John Wiley, New York.
- Frynas, J. G and ; K., Mellahi (2014). Global Strategic Management. Oxford University
- Ghemawat, P. (2017). Strategy and the Business landscape. Pearson Publishers
- Hitt, Michael A., Ireland, R. D., Hoskisson, Robert, E. and S., Manikutty (2016). Strategic Management: A South- Asian Perspective. Cengage Learning
- Thompson, Arthur A and ; A., J. Strickland (2012). Strategic Management. McGraw Hill, New York.

## **Business Research Methods**

**Credits- 3****Course Objective:**

1. To understand meaning, role and scope of business research.
2. To familiarize students with the process of research problem identification and definition.
3. To provide a hands-on session on key data analysis techniques commonly used in business research.

**Course Outcomes:**

1. Apply the major types of research designs, methodologies and analysis methods (both qualitative and quantitative).
2. Write a suitable research methodology and select appropriate data collection process for a research problem.
3. Comprehend data using various Univariate analysis, Bivariate and Multivariate techniques.
4. Learn to write a formal research proposal and research report.

**Unit 1: Introduction**

Introduction to business research-types of research, process of research, Formulation and definition of the research problem, approaches to research

**Unit 2: Research Design**

Requirement and functions of research design: exploratory, descriptive, experimental. Reliability and Validity of research instruments. Methods of data collection-primary and secondary sources; Attitudinal scales- Likert, Thurstone, Guttman scales; Concept of measurement and scale. Design of questionnaire.

**Unit 3: Sampling and Data Analysis**

Concept, designs; types of sampling designs- probability, non- probability, mixed sampling designs; sampling frame; Sample size determination;

#### **Unit 4: Quantitative Analysis Techniques**

Data processing- editing, coding and tabulating; Data analysis-univariate, bivariate, multivariate. Hand on session on data analysis techniques: Chi-square, T-test, ANOVA, Factor analysis, simple and multiple Regression and Discriminant analysis.

#### **Unit 5: Report Writing and research tools**

Writing a research proposal, online research tools. Writing research reports: executive summary, abstract, referencing style. Ethics in research.

#### **Text Books:**

- Cooper Donald, Schindler Pamela, Sharma J K (2014), Business Research Methods, 12/e, McGraw Hill Education
  - Malhotra K. Naresh, Dash Satyabhushan (2015), Marketing Research 7/e, Pearson Education Ltd.
- S

#### **Reference Books:**

- Bryman Alan, Bell Emma (2015), Business Research Methods, 4/e, Oxford University Press
- Saunders Mark, Lewis Philip, Thornhill Adrian (2011), Research Method for Business Student, 5/e, Pearson Education.
- Hair F. Joseph, Black C. William, Babin Barry J. Anderson E. Rolph (2015), Multivariate Data Analysis, 7/e, Pearson Education

## **Financial Management**

**Credits- 3**

#### **Course Objectives:**

1. To examine the role of finance managers of modern corporate firms in order to achieve the objective of wealth maximisation.
2. This course will familiarize students with the financial concepts, techniques, tools and decision making in business enterprises
3. To enable students to compute the price, yield, coupon, and time to maturity for bonds and return for stocks and understand cost of capital
4. To enable students to describe how people analyze the corporate leverage under different conditions.
5. Implement various investment criteria and demonstrate how risk is assessed.

#### **Course Outcomes:**

Upon successful completion of the course the student should be able to:

1. Apply techniques for estimating the cost of each component of the cost of capital to incorporate it into investment decision making and also to analyse the criteria for deciding the optimal finance mix.
2. Apply the appropriate capital budgeting techniques for evaluating projects and investments.
3. Understand the concept of working capital and the working capital policies to manage cash and account receivable for a company.
4. Evaluate the Dividend decisions of a company and also apply the concepts of financial management to contemporary financial events.

### **Unit 1: Overview of Finance Functions**

Financial management: Functions, scope and objectives, Environment of Financial Management; Time Value of Money – Annuity and present value of different types of cash flows, concept of Risk and Return, Equity & Bonds - YTM.

### **Unit 2: Financing Decision**

Capital Structure; The concept of Operating, Financial and Combined Leverage; Designing the capital structure- Net Income Approach; Net Operating Income Approach; Traditional Approach and MM Hypothesis with and without Corporate Taxes; EBIT-EPS analysis, Concepts and estimation of Cost of Capital- WACC, levered/unlevered cost of capital, Cost of Capital in practice, Dynamic cost of capital.

### **Unit 3: Investment Decision**

Need for Investment Decision; Estimation of Cash Flows, Project evaluation techniques: Discounting Methods and non-Discounting techniques, Factoring Risk and Price change; Risk Analysis in Investment Decisions-Certainty Equivalent; Risk Adjusted Discount Rate; Decision Tree Approach.

### **Unit 4: Working Capital Decision**

Concept of Working Capital - Fixed and Fluctuating, Gross vs Net, Factors affecting Working Capital Management; Working Capital gap, Management of Cash, Inventories, Receivables and Trade Liabilities.

### **Unit 5: Dividend Decision**

Retained Earnings and Dividend Decision; Theories related to dividend policy; Dividend Policy Decision, ESOP and Bonus Shares. Special Issues in Finance

### **Text Books:**

- Brealey, R. R., Myers. S., Allen, F., & Mohanty, P. Principles of corporate finance (8th ed.) New Delhi: Tata Mc-Graw Hill.
- I.M.Pandey – Financial Management (Vikas),( 11th Edition)

### **Reference Books:**

- E. F. Brigham , Financial Management, Theory and Practice, Cengage publication.
- J.C. Van Horne, Financial Management and Policy, Pearson publication.



- Aswath Damodaran, Corporate Finance Theory and Practice, 2ed (WSE) Paperback, Wiley publication
- Robert C. Higgins, Analysis for Financial Management, (XX Edition), McGraw Hill/Irwin Series.
- Ross, Westerfield & Jaffe, Principles of Corporate Finance, McGrawHill Education.
- Damodaran, Aswath , Applied Corporate Finance

## **Operations and Supply Chain Management**

**Credit- 3**

### **Course Objectives:**

1. To introduce students to the foundation of operations and supply chain management.
2. To help students understand the importance of operations and supply chain management in business functioning.
3. To familiarize students with the process of operations and supply chain management.
4. To help students to learn various supply chain management tools.

### **Course Outcomes:**

Upon successful completion of the course the student should be able to:

1. Understand the foundations of operations management.
2. Identify issues related to managing operations processes and implement controls.
3. Understand the criticality of resource planning in ensuring effectiveness of operations.
4. Learn about the foundation concepts of distribution and logistics management.

**Unit 1:** Operations Management: Objectives, Types of Production Systems, Operations Strategy, Product Life – Cycle, Functions and Scope, Design of Products and Services: Product Development Process, Contemporary issues in OM

**Unit 2:** Facility Planning: Location, Layout, Loading, Routing, Sequencing, dispatching, Expediting, Concept of Quality, Quality Control tools, Emerging approaches in operations control

**Unit 3:** Forecasting: Qualitative and Quantitative methods, Time Series Analysis, Inventory Management: Inventory Control, Economic Order Quantity (EOQ) Models, Classification of inventory, Risk pooling, Sales and Operations Planning, Material Planning: Aggregate Production Planning, Capacity Planning, Material Requirement Planning (MRP), Enterprise Resource Planning (ERP), Use of advanced tools & techniques in resource planning

**Unit 4:** Objective and importance of SCM, Evolution of SCM, Process views of SCM, Decision phases in SCM, Value of Information and supply chain integration: Managing uncertainties in SCM, Bullwhip effect, Key issues in Supply Chain Management, Distribution and logistics in supply chains

**Unit 5:** Application of Supply Chain Management, Contemporary issues and sectoral analysis from SC perspective.

**Text Books:**

- Operations and Supply chain management by Richard B. Chase, Ravi Shankar
- Operations management : Theory and practice by B. Mahadevan
- Supply chain management by Sunil Chopra, Peter Meindl, D.V. Kalra

**References Books:**

- Operation Management: K. N. Dervitsiotis, McGraw-Hill International Company.
- Operations Management: R.S. Russell, and B.W. Taylor, Pearson Education
- Lean Supply Chain and Logistics Management by Paul Myerson

## **AI Applications in Business**

**Credit -3**

**Course Objectives:**

1. To describe the importance and application of AI in business.
2. To explain application of stochastic models and reinforcement learning.
3. To explain the process of creating a neural network.
4. To illustrate the development of AI strategy.

**Course outcomes:**

Upon successful completion of this course students will be able to:

1. Appreciate the application of AI in business scenarios.
2. Design artificial neural network.
3. Conceptualize the application of NLP and reinforcement learning in business.
4. Contribute for formulating AI strategy in an organizational context.

**Unit 1: Introduction to Artificial Intelligence**

Overview of artificial intelligence - evolution, definition, approaches, applications; drivers of AI; AI for people and business framework, Machine learning process; types of learning – supervised, unsupervised, semi-supervised.

**Unit 2: Artificial Neural Network**

Overview of neural network – brain analogy, perceptron, sigmoid neuron; working of neural network – hidden layers, activation function, weights, bias, cost function, gradient descent, back propagation; clustering using neural network.

**Unit 3: Stochastic Models and Reinforcement Learning**

Stochastic process, Poisson process, Markov chains, Markov decision process and reinforcement learning

**Unit 4: Application of Artificial Intelligence**

Natural language processing, automating customer interactions, data-based decision making, predict events and outcomes, building artificial minds, personalization and recommender system, computer vision, developing AI strategy.

**Suggested Readings:**

- Doug Rose (2020), Artificial Intelligence for Business, 2nd Edition, Pearson Business Analytic Series.
- Deepak Khemani (2013), A First Course in Artificial Intelligence, McGraw Hill.
- Alex Castrounis (2019), AI for People and Business, O'Reilly Media, Inc.
- Sudhi Sinha, Khaled Al Huraimel (2020), Reimagining Businesses with AI, Wiley.
- Bernard Marr, Matt Ward (With) (2019), Artificial Intelligence in Practice: How 50 Successful Companies Used AI and Machine Learning to Solve Problems, Wiley.

## **Design Thinking**

**Credits- 3**

**Course Objectives:**

1. To introduce students to the principles and processes of design thinking for innovative problem-solving.
2. To equip students with tools and techniques to approach challenges creatively.
3. To foster empathy, collaboration, ideation, prototyping, and testing skills for practical solutions.
4. To enable students to integrate design thinking into various domains like business, education, and technology.

**Course Outcomes:**

On successful completion of the course, students will be able to:

1. Understand the core principles and processes of design thinking.
2. Develop user-centered solutions to complex problems.
3. Apply creative and critical thinking methods to ideate innovative solutions.
4. Prototype and test solutions in iterative cycles to refine outcomes.
5. Integrate design thinking tools and techniques into organizational and real-world scenarios.

**Unit 1: Introduction to Design Thinking**

Definition and Importance of Design Thinking, Key Principles: Empathy, Define, Ideate, Prototype, and Test, History and Evolution of Design Thinking, Design Thinking vs. Traditional Problem-Solving Approaches, Applications of Design Thinking in Business, Education, and Technology

**Unit 2: Empathy and Problem Definition**

Understanding User Needs and Context, Empathy Mapping and Journey Mapping, Identifying and Defining the Problem Statement, Framing "How Might We" Questions, Tools: Interviews, Surveys, and Observations

### **Unit 3: Ideation and Prototyping**

Ideation Techniques: Brainstorming, SCAMPER, and Mind Mapping, Concept Development and Selection, Prototyping Basics: Low-Fidelity vs. High-Fidelity Prototypes, Tools and Methods for Rapid Prototyping, Collaboration and Teamwork in Ideation

### **Unit 4: Testing and Iteration**

Testing Prototypes with Users: Methods and Approaches, Gathering Feedback and Insights, Iterative Refinement of Prototypes, Scaling Solutions: From Prototype to Implementation, Measuring the Impact of Design Thinking Solutions.

#### **Text Books:**

- Brown, T. "Change by Design: How Design Thinking Creates New Alternatives for Business and Society", Harper Business.
- Kelley, T. & Kelley, D. "Creative Confidence: Unleashing the Creative Potential Within Us All", Crown Publishing.
- Liedtka, J. & Ogilvie, T. "Designing for Growth: A Design Thinking Toolkit for Managers", Columbia Business School Publishing.

#### **Reference Books:**

- Plattner, H., Meinel, C., & Leifer, L. "Design Thinking: Understand–Improve–Apply", Springer.
- Kumar, V. "101 Design Methods: A Structured Approach for Driving Innovation in Your Organization", Wiley.

## **Managing Happiness**

### **Credit- 2**

#### **Course Objectives:**

1. To explore timeless wisdom from Indian traditions and apply it to modern life and management.
2. To introduce practical frameworks for self-awareness, leadership, and well-being.
3. To cultivate a holistic approach to happiness, incorporating ethics, compassion, and mindfulness.
4. To integrate selfless service, love, and meditation for personal and professional growth.

#### **Course Outcomes:**

1. Develop a deeper understanding of happiness through ethics, self-awareness, and mindfulness.
2. Apply ancient wisdom to contemporary challenges in business and life.
3. Enhance emotional intelligence and resilience through selfless service and compassion.
4. Cultivate leadership qualities rooted in ethical values and holistic well-being.

**Unit 1: Ethics & Purpose**

- Pleasure vs happiness, long term happiness and short term happiness
- Understanding Ethical Decision-Making and Leadership
- Aligning Personal and Professional Goals with Purpose
- The Role of Integrity, Responsibility, and Righteous Action in Leadership

**Unit 2: Love & Compassion**

- Emotional Intelligence and Compassion in Leadership
- The Power of Selfless Love in Personal and Professional Growth
- Cultivating Trust and Relationships through Service

**Unit 3: Self-Awareness & Mindfulness**

- Understanding the Self: Consciousness, Awareness, and Growth
- Developing self-belief and unity with nature
- The Role of Meditation, Breathing Exercises, Mindfulness Routines, Reflection, and Mind-Body Alignment

**Unit 4: Selfless Leadership & Service**

- Action Without Attachment: The Secret to Stress-Free Success
- Leadership through Service and Contribution to Society
- Integrating Work and Well-Being for Sustainable Happiness

**Textbook and Reference Books:**

- Mukundananda, S. (2020). The Art and Science of Happiness. Rupa Publications.
- Sharma, S. (2023). The Happiness Story: Unlocking the Secrets to Living Your Best Life. Westland Publications.
- Chopra, D. (2009). The Ultimate Happiness Prescription. Harmony.
- Krishnan, C. A. (2023). The Happiness Flywheel: How to Achieve Success by Leveraging Corporate



**Course Objectives, Learning Outcomes, Contents  
and Suggested Reference of Core Papers/  
Lab/Workshops**

**THIRD SEMESTER**

# **Business Analytics**

## **Credits-3**

### **Course Objective:**

1. To equip students with techniques for making data driven business insights for decision making

### **Course Outcomes:**

Upon successful completion of this course students will be able to:

- 1.a.i.1. Identify challenges related to business analytics/business intelligence projects.
- 1.a.i.2. Apply techniques for ensuring quality data for business analytics/ business intelligence projects.
- 1.a.i.3. Apply appropriate analytical/mining methods for business problem solving and decision making.

### **Unit 1**

Introduction to Business Analytics. Organization/sources of data, Data quality issues, data classification.

### **Unit 2**

Data Preparation, Data exploration using SQL, dealing with missing values and outliers.

### **Unit 3**

Illustrations of Descriptive analytics, Data visualization, Prescriptive analytics and Predictive analytics for decision support.

### **Unit 4**

Overview of Data Mining, Data Pre-processing, Data transformation, Distance measures, Applications of Data Mining.

### **Unit 5**

Mining Frequent Patterns, Associations, Correlations, Classification, Prediction, Clustering, Accuracy measures.

(The course delivery involves lectures and lab based practical exercises)

### **Text Book:**

- Albright S.C. and Winston W.L. (2019). *Business Analytics: Data Analysis and Decision Making*, 6th edition, CENGAGE.
- Kumar, U. Dinesh (2017). *The Science of Data Driven Decision Making*, Wiley
- Tan P., Steinbach M. and Kumar V. (2016). *Introduction to Data Mining*, Pearson.
- Reference Books
- Camm et Al. (2015). *Essentials of Business Analytics*. Cengage
- Specific URLs to be shared by Instructor

# **Project Management**

**Credits- 3**

## **Course Objectives:**

1. Introduce fundamental concepts and principles of project management within a business environment;
2. Equip students with the skills to plan, execute, monitor, and close projects effectively;
3. Demonstrate the integration of project management methodologies into strategic business processes;
4. Foster an understanding of risk management, resource allocation, and stakeholder communication in projects.

## **Course Outcomes:**

1. Understand and explain key project management concepts and methodologies;
2. Develop comprehensive project plans, including scope, timelines, and budgets;
3. Apply project management tools and techniques to monitor and control project progress;
4. Analyse and mitigate risks associated with projects;

## **Unit 1: Introduction to Project Management**

Definition and characteristics of a project; Project management frameworks and methodologies; The role of a project manager; Project life cycle: initiation, planning, execution, monitoring and controlling, closing; Importance of project management in achieving business objectives.

## **Unit 2: Project Planning and Scheduling**

Defining project scope and objectives; Work Breakdown Structure (WBS); Project scheduling techniques: Gantt charts, Critical Path Method (CPM), Program Evaluation and Review Technique (PERT); Resource allocation and levelling; Time management and milestone setting.

## **Unit 3: Project Cost Management and Risk Analysis**

Estimating project costs: tools and techniques; Budgeting: developing and controlling project budgets; Financial appraisal and project selection; Risk management processes: identification, analysis, response planning, monitoring, and control; Techniques for risk assessment and mitigation.

## **Unit 4: Project Execution, Monitoring, and Closure**

Executing project plans and managing teams; Performance measurement: Key Performance Indicators (KPIs) and Earned Value Management (EVM); Quality assurance and control; Change management and configuration control; Project closure processes: final deliverables, documentation, lessons learned, and post-project evaluation.

## **Textbooks:**

- Project Management: A Managerial Approach by Jack R. Meredith and Samuel J. Mantel Jr.
- A Guide to the Project Management Body of Knowledge (PMBOK Guide) by Project Management Institute.



**Reference Books:**

- Project Management: The Managerial Process by Clifford F. Gray and Erik W. Larson.
- Projects: Planning, Analysis, Selection, Financing, Implementation, and Review by Prasanna Chandra.

## **Indian Knowledge System and Professional Ethics**

**Credits- 2****Course Objectives:**

1. To introduce the students to the rich heritage and relevance of the Indian Knowledge System (IKS) and its contributions to various disciplines.
2. To explore the concepts of ethics and morality as embedded in Indian traditions and their relevance to modern professional practices.
3. To develop an understanding of ancient Indian texts, philosophies, and their contemporary applications.
4. To enhance the ethical decision-making skills of students by integrating cultural and professional values.
5. To analyze the role of IKS in sustainable development, leadership, and innovation.

**Course Outcomes:**

Upon successful completion of this course, students will be able to:

1. Understand the essence and scope of the Indian Knowledge System and its applications in modern contexts.
2. Appreciate ethical principles derived from Indian traditions and their relevance to professional behavior.
3. Develop a multidisciplinary perspective by exploring ancient Indian sciences, arts, and philosophies.
4. Apply ethical reasoning and decision-making to address contemporary professional challenges.
5. Promote sustainable and value-based leadership through insights from Indian traditions.
6. Integrate Indian cultural values with modern professional ethics for holistic personal and professional development.

**Unit 1: Introduction to Indian Knowledge System (IKS)**

Definition, Meaning, and Scope of IKS, Fundamental Principles and Frameworks in Indian Knowledge Traditions, Contributions of Indian Knowledge to Science, Mathematics, Medicine, and Philosophy, Concept of Integral Development in Indian Knowledge Traditions, IKS and Modern Disciplines: Interdisciplinary Applications, Case Studies: Insights from Ancient Indian Texts

**Unit 2: Ethics and Values in Indian Traditions**

Foundations of Indian Ethical Thought: Dharma, Karma, and Nishkama Karma, Principles of Truth (Satya), Non-Violence (Ahimsa), and Self-Control (Dama), Ethical Values in Vedic,

Upanishadic, and Epic Literature (Ramayana, Mahabharata, Bhagavad Gita), Concept of Duty and Justice in Indian Philosophy, Contemporary Relevance of Indian Ethical Principles in Professional Contexts, Case Studies: Ethical Decision-Making in Indian Context

### **Unit 3: Professional Ethics and Leadership**

Definition and Scope of Professional Ethics, Ethical Challenges in Professional Life: Conflicts, Dilemmas, and Solutions, Leadership Principles from Indian Texts (Arthashastra, Bhagavad Gita, and Upanishads), Sustainability and Social Responsibility in Professional Ethics, Role of Emotional Intelligence, Empathy, and Integrity in Leadership, Case Studies: Value-Based Leadership and Decision-Making

### **Unit 4: Contemporary Relevance of IKS and Ethics**

IKS and Sustainable Development: Environmental Ethics and Resource Management, Indian Perspectives on Wellness and Work-Life Balance (Yoga and Ayurveda), Cultural Heritage and Innovation: Lessons for Entrepreneurs and Professionals, Technology and Ethics: Integrating Indian Values in the Digital Age, Global Relevance of Indian Knowledge Traditions in a Multicultural World, Case Studies: IKS in Modern Business, Governance, and Education.

### **Reference Books:**

- V. Srinivasan - "The Indian Ethos for Modern Management", Tata McGraw Hill.
- Radhakrishnan S. - "Indian Philosophy", Oxford University Press.
- B.K. Narsimha Murthy - "Indian Ethics and Professional Values", Global Academic Publishers.
- T.S. Rukmani - "Hindu Ethics: Purity, Abortion, and Euthanasia", Bloomsbury Publishing.
- Kautilya (Translated by R. Shamasastri) - "Arthashastra", Penguin Classics.
- E. F. Schumacher - "Small is Beautiful: A Study of Economics as if People Mattered", Harper & Row.
- M.K. Gandhi - "Ethical Religion", Navajivan Publishing House.
- Bibek Debroy - "The Bhagavad Gita for Millennials", Rupa Publications.

## **Executive Leadership Evaluation Stage-I**

**Credits- 3**

### **Course Objective:**

1. To explore the motivation and preferences of the students
2. To assess the students in terms of leadership roles

### **Course Outcomes:**

1. To identify the gaps in skills and traits as a leader
2. To provide actionable insights to fill these gaps

The ELES is designed to assess the student's motivations, critical thinking ability, traits and leadership potential. It will prepare them to drive performance and create value for their respective organizations towards the mid and on course completion. The evaluation includes comprehensive viva voce of individual participants to identify any gap and proposing suitable strategic interventions which the individual student may use to take leadership positions.



**Course Objectives, Learning Outcomes, Contents  
and Suggested Reference of Core Papers/  
Lab/Workshops**

**FOURTH SEMESTER**

# **Leadership and Change Management**

**Credits- 3**

## **Course Objective:**

1. This course offers an understanding of Leadership Activities and their influence on the Management of change in organizations.
2. To critically assess existing theory and practice in Leadership.
3. To evaluate Leadership-related social, cultural, ethical, and environmental responsibilities and issues.
4. To understand factors that influence change and deduce solutions to overcome the resistance to change.
5. To learn conflict management styles, motivational techniques, and coordination in the work environment.

## **Course Outcomes:**

Upon successful completion of the course, the student should be able to:

1. To get a conceptual understanding of Leaders and distinguish between leaders and managers.
2. Describe the various theories and compare the different styles of leadership.
3. Analyse the need for organizations to imbibe Change Management.
4. Sketch out the factors that influence change and deduce solutions to overcome the resistance to change.
5. Outline the concept of organizational culture and establish its significance to Change Management.

## **Unit I: Introduction**

Leadership: Concept, Characteristics, roles, motives, skills, and functions. Leadership Vs Management. Effective leadership behaviors and attitudes. Impact of Leadership on organizational performance.

## **Unit 2: leadership Styles and Theories**

Popular Leadership Styles, Entrepreneurial and Super Leadership. Transactional Vs Transformational leadership. Trait and Path-Goal theories of leadership.

## **Unit 3: Organisational Change**

Nature and Types of Organizational Change, Causes of and rationales for change, environmental and internal organizational determinants of change. Planned and emergent change. Proactive and reactive emergent change and response to these changes. Incremental and radical change, and rates/levels of change as a function of organizational life cycle positions. The links between nature/type of change and nature/type of leadership required e.g. transactional Vs transformational. The roles of corporate vision and strategy in change.

## **Unit 4: Influence of Change**

Six belief changers that Influence change, organizational change through influencing individual change. Approaches: Kotter's eight-step plan, and Greiner's Change process model. Four key

drivers of organizational change. Factors contributing to resistance to change. Best practices to overcome resistance to change.

### **Unit 5: Organisational Culture and Change**

Theoretical frameworks, multi-source feedback for organizational change, Models of diagnosing organizational groups and jobs. The organizational change web Resistance to change, Barriers to organizational change, rethinking resistance to organizational change, strategies to deal with resistance. Culture and the change process. The personnel manager as a cultural change agent handling power and political issues arising from change. The theoretical and practical contexts of cultural maintenance and cultural change strategies, corporate reorganization, and sub-culture management. Strategies and methods for achieving cultural change.

### **Unit 6: Intervention Strategy**

Intervention Strategy, Structural, technological, and process factors in intervention strategies. Advantages/limitations of change technologies and associated leadership models. Role of leadership in the change process. Leadership and emotional knowledge strategies to achieve congruence of personnel, structure, and culture. Challengers of Leading Change.

#### **Text Books:**

- S. Chandan, “Organisational Behaviour”, Vikas Publishing House Pvt. Ltd. 3rd Edition ZX
- Nilakant V and Ramnarayan, “Managing Organizational Change”, Response Books, 2006.
- Kavitha Singh, “Organization Change & Development”, 2005, Excel Books.

#### **Reference Books:**

- Adrain Thornhill, Phil Lewis, Mike Millmore, Mark Saunders, “Managing Change – A Human Resource Strategy Approach”, Pearson Education, 2006.
- Cummings, T.G. & Worley, C.G. (2001). Essentials of Organization Development and Change, South – Western College Publishing. Thomson Learning, Cincinnati. OH.
- Leon de Caluws and Hans Vermaak, Learning to change. A guide for organization change agents, Sage Publications.

#### **Suggested Readings:**

- Herbert G. Hicks and C. Ray Gullett, “Theory and Behavior”, McGraw Hill.
- Andrew I Dubrin, “Research Findings, Practice and Skills”, Houghton Mifflin Company, Third Edition.

## **ESG and Sustainability**

**Credits - 3**

#### **Course Objectives:**

1. To provide an understanding of Environmental, Social, and Governance (ESG) principles and their impact on business strategy.

2. To explore sustainability frameworks, global standards, and regulatory requirements for corporate responsibility.
3. To analyse ESG risks and opportunities in business decision-making and investment practices.
4. To equip students with the knowledge to integrate sustainability and ethical considerations into business operations.

### **Course Outcomes:**

On successful completion of the course, students will be able to:

1. Understand the core concepts of ESG and sustainability and their significance in the corporate world.
2. Evaluate ESG frameworks, reporting standards, and regulatory policies for sustainable business practices.
3. Analyse ESG risks, opportunities, and their impact on financial performance and stakeholder value.
4. Develop responsible business strategies that align with sustainability goals and corporate governance principles.

### **Unit 1: Fundamentals of ESG and Sustainability**

Introduction to ESG: Definition, Scope, and Importance, Sustainability and Business: Concept of Triple Bottom Line (People, Planet, Profit), Global Sustainability Challenges: Climate Change, Resource Depletion, Social Inequality, UN Sustainable Development Goals (SDGs) and Business Responsibility

### **Unit 2: ESG Reporting, Regulations, and Frameworks**

Global ESG Frameworks: GRI (Global Reporting Initiative), SASB (Sustainability Accounting Standards Board), TCFD (Task Force on Climate-Related Financial Disclosures), Regulatory Landscape: SEBI ESG Guidelines, EU Green Deal, US SEC Climate Disclosure Rules, ESG Ratings and Indices: MSCI ESG Ratings, Dow Jones Sustainability Index (DJSI), Corporate ESG Reporting and Disclosure Practices

### **Unit 3: ESG Risk Management and Business Strategy**

Environmental Risk Management: Carbon Footprint, Circular Economy, Renewable Energy Adoption, Social Responsibility and Ethics: Diversity and Inclusion, Employee Well-Being, Human Rights in Business, Corporate Governance and Ethics: Board Diversity, Executive Compensation, Anti-Corruption Measures, Sustainable Finance and Impact Investing: Green Bonds, ESG Funds, Integrating ESG into Business Strategy and Decision-Making

### **Unit 4: Emerging Trends in ESG and Sustainability**

Technology and ESG: AI, Block chain, and IoT for Sustainability, ESG in Supply Chain Management: Ethical Sourcing, Sustainable Procurement, Waste Reduction, Carbon Markets and Climate Action: Net-Zero Strategies, Carbon Offsetting, Emissions Trading, ESG and Brand Reputation: Consumer Awareness, Greenwashing, Corporate Activism, Future of ESG and Sustainability: Evolving Regulations, Innovations, and Business Leadership in Sustainability

### **Textbooks:**

- Andrew Winston, The Big Pivot: Radically Practical Strategies for a Hotter, Scarcer, and More Open World (Harvard Business Review Press)
- Robert G. Eccles, The Investor Revolution: Shareholders Are Pushing for Sustainability (Harvard Business Review)

#### **Reference Books:**

- Paul Hawken, The Ecology of Commerce (Harper Business)
- Geoffrey Heal, Endangered Economies: How the Neglect of Nature Threatens Our Prosperity (Columbia University Press)
- R. Edward Freeman, Stakeholder Theory: The State of the Art (Cambridge University Press)
- Herman B. Dutch Leonard & George Serafeim, Corporate Sustainability: A Deep Dive (Harvard Business School Press)

## **Major Research Project**

### **Credits -6**

In Sem IV, all the student are required to work on a major research project under the supervision of assigned faculty member by the department. The students are required to select a research problem preferably on a topic related with contemporary issues in management. It is mandatory for the students to get advance written approval of the supervisor before finalization of the topic. Each student shall prepare a detailed research proposal and the copy of the same is required to be submitted to faculty co- coordinator duly signed by the supervisor.

On the prescribed date, two hard and one soft copy of the reports are required to be submitted to the department as per the format provided by the concerned supervisor. The completion of the research project must be certified by the supervisor and approved by the HOD.

The evaluation of the research project shall be carried out jointly by a panel of internal and external examiner. The department may invite external examiners across the specialization and industry.

### **Course Outcomes:**

Upon successful completion of the course the student should be able to:

1. Design and implement a research-based project.
2. Demonstrate time and project management in the successful identification of a research project,
3. Development of a research design, collection of accurate and precise data, critical analysis and
4. Interpretation of results, retrieval of information, and critical reading of literature.
5. Report research findings in written and verbal forms
6. Use research findings to advance education theory and practice.

## **Executive Leadership Evaluation**

### **Credits- 3**



**Course Objective:**

1. To explore the motivation and preferences of the students
2. To assess the students in terms of leadership roles

**Course Outcomes:**

1. To identify the gaps in skills and traits as a leader
2. To provide actionable insights to fill these gaps

The ELES is designed to assess the student's motivations, critical thinking ability, traits and leadership potential. It will prepare them to drive performance and create value for their respective organizations towards the mid and on course completion. The evaluation includes comprehensive viva voce of individual participants to identify any gap and proposing suitable strategic interventions which the individual student may use to take leadership positions.

## **List of Discipline Specific Electives under Specializations**

### **Specialization Area: Operations and Supply Chain Management**

1. Operation Analytics
2. Supply Chain Modelling
3. Supply Chain Strategy and Innovation
4. Supply Chain Planning and Execution
5. Behavioral Operations and Supply Chain Management
6. Digital Operations and Supply Chain Management
7. Project Management
8. Business Process and Change Management
9. Service Operations Management
10. Logistics Planning and Management
11. Procurement and Supplier Relationship Management
12. Warehouse Management
13. Sustainable Supply Chain Management
14. International Logistics Management
15. Production Planning and Control
16. Total Quality Chain Management

### **Specialization Area: Finance**

1. Investment Management
2. Investment Banking and Financial Services
3. Financial Markets and Institutions
4. International Financial Management
5. Corporate Mergers, Acquisitions and Restructuring
6. Financial Derivatives and Risk Management
7. Financial Modeling and Forecasting
8. Data Analytics In Finance
9. Financing the Entrepreneurial Business
10. Project Appraisal and Finance

11. Behavioural Finance
12. Wealth Management and Financial planning

**Specialization Area: Human Resource Management**

1. Industrial Relations & Labor Legislation
2. Organizational Development and Team Building
3. Strategic Human Resource Management
4. Cross Cultural and International Human Resource Management
5. Training and Development
6. Compensation Management
7. Performance Management
8. Changing Paradigms in Leadership
9. Interpersonal Processes and Counselling Skills for Managers
10. HR Analytics
11. Negotiation Skills and Conflict Management
12. Business Excellence through HRM
13. HRM in Service Sector
14. Talent Management
15. Contemporary Issues in HRM

**Specialization Area: Marketing Management**

1. Consumer Behaviour
2. Integrated Marketing Communication
3. Business to Business Marketing
4. Sales Management
5. Service Marketing
6. Global Marketing Management
7. Strategic Brand Management
8. Digital Marketing
9. Retailing Management

10. Marketing Channels
11. Marketing Analytics
12. Customer Acquisition, Retention and Loyalty
13. Contemporary Issues in Marketing Management

**Specialization Area: International Business**

1. International Business Strategy
2. International Trade: Policies and Strategies
3. India's Foreign Trade and Investment
4. Transnational and Cross-Cultural Marketing
5. Multinational Business Finance
6. International Joint Ventures, Mergers and Acquisitions
7. Cross Cultural Human Resource Management
8. Legal Dimensions of International Business
9. Contemporary Issues in International Business

### **Specialization Area: Information Technology Management**

1. Big Data Analytics
2. Business Intelligence and Analytics
3. Information Technology and Business Process Reengineering
4. Data Mining for Business Analytics
5. Database Management System
6. E-Business
7. E-governance for Inclusive Development
8. Enterprise Resource Planning
9. Software Project Management
10. Business Systems Analysis and Design
11. Contemporary Issues in Information Technology Management

### **Specialization Area: Entrepreneurial Management**

1. Identifying and Evaluating Business Opportunities.
2. Design Thinking and Product Development
3. Financing the Entrepreneurial Business
4. Entrepreneurial Marketing
5. Entrepreneurship and E-business
6. Creativity and Innovation.
7. Family Business Management.
8. Social Entrepreneurship.
9. Contemporary Issues in Entrepreneurial Management

### **Specialization Area: Business Analytics {big data analytics common in BA and IT}**

1. Big Data Analytics
2. Data Analytics using Python
3. Data Analytics using R
4. Data Warehousing and Data Mining
5. Machine Learning
6. Optimization and Simulation Modeling
7. Predictive Modeling
8. Natural Language Processing

# **Specialization Area: Operations and Supply Chain Management**

## **Operations Analytics**

**Credits - 3**

### **Course Objectives:**

1. Upon successful completion of this course, students will be able to: Develop a strong foundation in operations research techniques, including linear and integer programming, to optimize business decision-making.
2. Apply analytical tools to solve real-world operational challenges in supply chain management, resource allocation, and project planning.
3. Evaluate and implement multi-criteria decision-making techniques such as Goal Programming and Analytical Hierarchy Process for complex business scenarios.
4. Enhance problem-solving and decision-making skills by integrating quantitative methods and sensitivity analysis for effective operational strategy development.

### **Course Outcomes:**

Upon successful completion of this course students will be able to:

1. Identify different analytical tools and techniques
2. Understand the criticality of operation analytics within an organization
3. Examine and implement approaches to effectively manage the operations and supply chain performance
4. Make effective decisions by evaluating criteria and scenarios in the business context.

### **Unit 1: Introduction**

Introduction to Operation Research (OR), linear programming (LP), formulating decision problems using linear programming, interpreting the results and sensitivity analysis.

### **Unit 2: Application of Linear Programming**

Multi-period LP models. Applications of linear programming in product mix, blending, cutting stock, transportation, transshipment, assignment, scheduling, planning and revenue management problems. Network models and project planning.

### **Unit 3: Capital Budgeting**

Integer Programming (IP) problems, mixed-integer and zero-one programming. Applications of IP in capital budgeting, location decisions.

### **Unit 4: Portfolio Theory**

Multi-Criteria decision (MCDM) techniques: Goal Programming (GP) and Analytical Hierarchy process (AHP). Non-linear programming, portfolio theory.

### **Text Books:**

- Hwang, Shiuh-Nan, Lee, Hsuan-Shih, Zhu, Joe (2014), Handbook of Operations Analytics Using Data Envelopment Analysis, Springer

- Thomas Devonport, Competing on Analytics, Tata Magraw Hill

**Reference Books:**

- Jank Wolfgang, Business Analytics for Managers, Springer
- James R. Evans, University of Cincinnati, Business Analytics, Pearson Education

## **Supply Chain Modelling**

**Credits - 3**

**Course Objectives:**

1. Understand the fundamental concepts, decision domains, and mathematical models in supply chain modeling.
2. Develop the ability to design resilient and efficient supply chain networks using qualitative and quantitative approaches.
3. Apply forecasting, optimization techniques, and contract-based coordination to enhance supply chain performance.
4. Utilize data analytics and advanced algorithms for effective decision-making and problem-solving in supply chain management.

**Course Outcomes:**

Upon successful completion of the course the student should be able to:

1. Describe supply chain modelling
2. Design robust and dynamic supply chain network
3. Apply models for forecasting and research
4. Analyze and interpret data to provide meaningful information to assist in managerial decision making

**Unit 1: Introduction**

Introduction, issues in supply chain modelling, decision domains in supply chain modeling, mathematical modelling, concept of descriptive analytics, Multi criteria decision making models, application of game theory, application of queuing theory.

**Unit 2: Supply chain resilience**

Supply chain risks, disruptions, and ripple effect, managing supply chain resilience, framework, capabilities, strategies, capacity, modelling supply chain resilience, measuring supply chain resilience.

**Unit 3: Supply Chain Coordination: Modelling through Contracts**

Vertical Integration, Coordination through Incentives, Supply Chain Collaboration, Types of contracts, Price-Only/Wholesale Price Contract, Quantity Discount Contract, Coordination through Credit Mechanism, Buyback Contract, Revenue-Sharing Contract, Quantity Flexibility Contract, Coordination under Asymmetric Information.

**Unit 4: Network design**

Importance of network planning, Network design and location decisions – facility layout and location: Qualitative aspects, Quantitative models: Factor rating method, Break-even analysis, Centroid method, Product line mix at plants, Production planning and scheduling, MCDM

methods, Implementations of Simulated Annealing, Genetic Algorithm, Compare with Genetic Algorithm.

**Text Book:**

- S. Chopra, P. Meindl and Dharam Vir Kalra (Autor), Supply Chain Management, Pearson Education; Seventh edition

## **Supply Chain Strategy and Innovation**

**Credits - 3**

**Course Objectives:**

1. Understand the role of supply chain strategy in driving innovation and competitive advantage.
2. Explore key supply chain initiatives that foster a conducive environment for creativity and efficiency.
3. Analyze the alignment of business and supply chain strategies to enhance organizational performance and sustainability.
4. Develop strategic decision-making skills to manage supply chain challenges, strategic fit, and collaborative partnerships effectively.

**Course Outcomes:**

Upon successful completion of this course students will be able to:

1. Analyze and interpret how supply chain strategy helps in boosting innovation.
2. Identify the application of supply chain initiatives for creating a conducive environment for innovation and creativity.
3. Critically assess and explain key current issues in the field of innovation.
4. Diagnose and provide effective solutions for innovation challenges.

**Unit 1:** Supply Chain Strategy, Strategic Planning, Introduction, Internal Inputs to supply chain strategy, Business strategy, Organizational strategy, Business plan, Value proposition, Set of core capabilities, cost structure, Revenue model. External input to supply chain strategy, Competition, Market conditions, Global perspectives.

**Unit 2:** Objectives of SCM, improving market knowledge, Implementing the three Vs—increased velocity, increased visibility, and reduced variability in the flows of goods and services, funds, and information, streamlining operations, improving management of risk, Increasing sustainability.

**Unit 3:** Alignment of organization and supply chain strategies, Value proposition, Core capabilities, Cost structure, Revenue model, customer focus, product development, market development, diversification, learning & organizational capability, sustainable competitive advantage through SC.



**Unit 4:** Managing SC for Strategic Fit: concept of strategic fit, steps in achieving strategic fit, impact of customer needs, impact of uncertainty, impact of implied demand uncertainties, multiple products & customer segments, PLC, globalization & competitive changes over time. Expanding Strategic Scope: Minimize local cost perspective, minimize functional Cost perspective, Maximize Company Profit perspective, Maximize SC Surplus perspective, Agile intercompany inter functional scope.

**Unit 5:** Strategic Partnerships & Alliances: Internal activities, acquisitions, Arm's-length transactions, strategic alliances, Collaborative Advantages, Framework for Strategic Alliances, Third Party Logistics (3-PL), Price water house Coopers Model, 3PL Issues and Requirements, 3PL Implementation Issues, 4 PL.

**Text Books:**

- Peter Meindl, Kalra, Supply Chain Management: Strategy Planning & Operation, Pearson, 3rd Edition.
- Tony Hines, Supply Chain Strategies – Customer Driven & Customer Focused, Elsevier, 1st Edition.

**Reference Books:**

- Chad W. Autry, Mark A. Moon, Achieving Supply Chain Integration: Connecting the Supply Chain Inside and Out for Competitive Advantage, Pearson Education
- Martin Christopher, Logistics & Supply Chain Management, 5/E, Pearson Education
- Kenneth Lyons, Brian Farrington, Procurement and Supply Chain Management, 9/E, Sage Publications.

## **Supply Chain Planning and Execution**

**Credits - 3**

**Course Objectives:**

1. Understand the principles of supply chain planning and the role of demand management, forecasting, and replenishment.
2. Explore operations planning, capacity management, and inventory control to optimize supply chain performance.
3. Analyze cost management strategies, supply chain contracts, and supplier relationships to enhance efficiency.
4. Develop strategic approaches for logistics, transportation, and reverse logistics to improve overall supply chain execution.

**Course Outcomes:**

Upon successful completion of this course students will be able to:

1. Analyze and interpret how planning is done in supply chain management
2. Identify the role of planning and control in operations and supply chain management
3. Examine and implement approaches to control supply chain cost and measure performance

4. Understand the scope of planning in ensuring efficient logistics and transportation operations

**Unit 1:** Demand Management, Parts of demand management, communicating demand, planning demand, influencing demand, managing parts of demand, Collaborative Planning, forecasting, and replenishment (CPFR), Demand forecasting, forecasting methods, key performance parameters, event management and demand forecasting, product life cycle.

**Unit 2:** Operations planning and control, sales and operations planning, resourcing planning, aggregate planning, capacity planning, master production schedule, bill of material, Inventory, material requirement planning, push-pull system, Just in Time system.

**Unit 3:** Supply chain cost, ownership of the supply chain cost, make-buy decisions, supply chain contracts, advantages of contacts, risks associated with contacts, developing relationship with suppliers, developing supply planning.

**Unit 4:** Logistics, functions of logistics, integrating logistics functions/activities, trends, objectives, logistics strategy, delivery of goods, delivery models, dispatching, expediting, role of third-party logistics service providers, warehousing objectives, strategies, and planning, capacity planning including numbers and location.

**Unit 5:** Transportation objectives, strategies, capacity planning, modes of transportation, rail, road, and air, intermodal, selection criteria, pros and cons of alternatives, types of carrier, reverse logistics, strategy and design for reverse logistics, cost benefits analysis.

**Text Books:**

- Dr. Neeraj Anand, Dr. Pankaj Madan, Supply Chain Management: Concept, Planning and Execution, Global Vision Publishing House
- Dr. Vinod Sayankar, Supply Chain Planning, Everest Publishing House

**Reference Books:**

- Liberatore Matthew, Supply Chain Planning , Business Expert Press
- Nydlova Olga, Collaborative Planning in Modern Supply Chain, LAP Lambert Academic Publishing

## **Behavioral Operations and Supply Chain Management**

**Credits - 3**

**Course Objectives:**

1. Understand the fundamentals of behavioral operations and their impact on supply chain decision-making.
2. Analyze the role of human behavior in supply chain relationships, trust, collaboration, and conflict resolution.
3. Examine behavioral factors contributing to the bullwhip effect and develop strategies to mitigate its impact.

4. Explore emerging trends, behavioral economics, and innovative applications in Indian supply chains.

**Course Outcomes:**

Upon successful completion of this course students will be able to:

1. Identify behavioural issues from operations and supply chain perspectives.
2. Analyse the impact of behavioural issues on day to day operations and supply chain performance.
3. Understand the impact of human behaviour on the bullwhip effect in supply chain management.
4. Analyze the digital supply chain from human behaviour perspectives.

**Unit 1:** Fundamentals of Behavioural Supply Chain, Introduction to Behavioural Supply Chain, Definition and Scope of Behavioural Supply Chain, Differences between Traditional and Behavioural Supply Chain, Importance of Human Decision-Making in Indian Supply Chains, Cognitive Biases in Supply Chain Decision, Confirmation Bias, Impact of Biases.

**Unit 2:** Human Behaviour in Supply Chain Relationships, Collaboration, Trust, and Communication in Indian Supply Chains, Role of Trust in Supplier-Buyer Relationships in India, Behavioral Challenges in Dealing with Unorganized Suppliers, Conflict Resolution and Negotiation Strategies.

**Unit 3:** Behavioural Issues in Supply Chain Processes, The Bullwhip Effect and Human Behaviour, Causes and Consequences of the Bullwhip Effect on Indian Supply Chains, Psychological and Behavioural Factors Driving Demand Distortion, Strategies to Reduce the Bullwhip Effect, Behavioral Challenges in Logistics and Warehouse Management.

**Unit 4:** Future Trends and Research Directions in Behavioural Supply Chain in India, Emerging Trends in Behavioural Supply Chain Management in India, The Role of Behavioural Economics in Future Indian Supply Chains. Startups Using Behavioural Insights for Supply Chain Efficiency.

**Text Books:**

- Dr. Neeraj Anand, Dr. Pankaj Madan, Supply Chain Management: Concept, Planning and Execution, Global Vision Publishing House
- Dr. Vinod Sayankar, Supply Chain Planning, Everest Publishing House

**Reference Books:**

- Liberatore Matthew, Supply Chain Planning , Business Expert Press
- Nydlova Olga, Collaborative Planning in Modern Supply Chain, LAP Lambert Academic Publishing

## **Digital Operations and Supply Chain Management**

## **Credits - 3**

### **Course Objectives:**

1. Understand the fundamental concepts, evolution, and key drivers of digital supply chain management.
2. Explore the role of emerging technologies such as IoT, AI, blockchain, and big data in transforming supply chains.
3. Develop strategies for implementing and integrating digital technologies across supply chain functions.
4. Analyze future trends, innovations, and sustainability aspects in digital supply chain management.

### **Course Outcomes:**

Upon successful completion of this course students will be able to:

1. Understand the concept of digital supply chain.
2. Transform the traditional supply chain into digital supply chain management.
3. Identify the key drivers and issues for the implementation of the digital supply chain.
4. learn tools and technologies of digital supply chain technologies.

**Unit 1:** Introduction to Digital Supply Chain (DSC), Definition and Evolution of Digital Supply Chains, Difference Between Traditional and Digital Supply Chains, Key Drivers of Digital Transformation in Supply Chains, Benefits and Challenges of Digital Supply Chains, Industry 4.0 and Supply Chain 4.0.

**Unit 2:** Technologies Enabling Digital Supply Chains, Internet of Things (IoT) in Supply Chain Management, Artificial Intelligence (AI) and Machine Learning (ML) Applications, Blockchain for Supply Chain Transparency and Security, Big Data Analytics and Decision-Making, Cloud Computing and Digital Twins in Supply Chains, Cybersecurity Challenges in Digital Supply Chains

**Unit 3:** Digital Supply Chain Strategy and Implementation, Developing a Digital Supply Chain Roadmap, Integration of Digital Technologies Across Supply Chain Functions, Supplier and Customer Digital Collaboration, Digital Procurement and Smart Contracts, Sustainable and Circular Digital Supply Chains, Measuring Digital Supply Chain Performance (KPIs and Metrics)

**Unit 4:** Future Trends and Innovations in Digital Supply Chains, Predictive and Prescriptive Analytics in Supply Chains, Autonomous Supply Chains and Robotics, Digital Sustainability and Green Supply Chains, Future Challenges and Research Directions in Digital Supply Chains.

### **Text Books:**

- Dr. Neeraj Anand, Dr. Pankaj Madan, Supply Chain Management: Concept, Planning and Execution, Global Vision Publishing House
- Dr. Vinod Sayankar, Supply Chain Planning, Everest Publishing House,

### **Reference Books:**

- Liberatore Matthew, Supply Chain Planning , Business Expert Press

- Nydlova Olga, Collaborative Planning in Modern Supply Chain, LAP Lambert Academic Publishing

## **Project Management**

**Credits - 3**

### **Course Objectives:**

1. Understand the fundamental principles, processes, and life cycle of project management.
2. Develop skills in project planning, cost estimation, time management, and risk assessment.
3. Apply project execution, control techniques, and performance measurement for successful project completion.
4. Demonstrate ethical decision-making and professional responsibility in project management

### **Course Outcomes:**

Upon successful completion of the course the student should be able to:

1. Apply project management concepts to address specific management needs at the individual, team, division, and/or organizational level
2. Identify the resources, costs and time constraints, tools and supplementary materials needed project life cycle provides internal stakeholders with information regarding project costs by considering factors such as estimated cost, variances and profits
3. Demonstrate effective project planning, execution and control techniques that result in successful projects
4. Demonstrate a strong working knowledge of ethics and professional responsibility in project management

### **Unit 1: Project Management Principles**

Definition of project, project management processes and other key concepts, principles of project management, roles and responsibilities of the project manager, project life cycle, causes of project failures

### **Unit 2: Planning the project**

Project planning process, project charter and project plan, work breakdown structure (WBS) techniques, project structuring and organization considerations, change management and conflict resolution issues.

### **Unit 3: Estimating Project Costs**

Type of costs, Elements of budget, approaches for estimating cost and budget, Factors influencing quality of estimates.

### **Unit 4: Estimating Project Time**

Activity sequencing, Estimating time, precedence network diagram, critical path method, program evaluation and review techniques, project scheduling, basics of scheduling.

### **Unit 5: Managing Risks, Project Control and Performance Management**

Risk concept and identification, risk assessment, prioritizing risks, risk response planning, Project tracking and control elements, factors contributing to successful project control, Measures of project success.

**Text Books:**

- Meredith J.R., Mantel S.J. and Shafer S.M. (2014) Project Management: A Managerial Approach, 9/e, I, Wiley Publishing.
- Straw, G (2015), Understanding Project Management, Kogan Page Ltd.

**Reference Books:**

- Charvat J. (2003) Project Management Methodologies: Selecting, Implementing and Supporting Methodologies and Processes for projects. 2003: John Wiley & Sons.
- PMI, A Guide to the Project Management Body of Knowledge

## **Business Process and Change Management**

**Credits - 3**

**Course Objectives:**

1. To introduce the concepts of business process management and change management in dynamic organizational environments.
2. To develop a comprehensive understanding of tools and techniques for redesigning processes to improve efficiency and effectiveness.
3. To explore strategies for managing organizational change, overcoming resistance, and fostering innovation.
4. To analyze the role of leadership and technology in driving successful business transformations.
5. To examine case studies that highlight best practices and challenges in process optimization and change management.

**Course Outcomes:**

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

1. Understand the principles and methodologies of business process management and their significance in organizational success.
2. Identify and evaluate the critical success factors for effective change management in business settings.
3. Design and implement process improvement initiatives aligned with strategic organizational goals.
4. Navigate the complexities of organizational culture and employee resistance during change initiatives.
5. Apply frameworks and tools for analysing, managing, and sustaining change in a variety of industries.
6. Explore the impact of digital transformation, agile practices, and sustainability on process and change management.

**Unit 1: Introduction to Business Process Management (BPM)**

Overview and Importance of Business Process Management, Key Concepts: Process Mapping, Workflow Design, and Process Optimization, BPM Life Cycle: Modeling, Analysis, Design, Implementation, Monitoring, and Improvement, Process Efficiency vs. Effectiveness: Balancing Objectives, The Role of Technology in BPM: AI, RPA (Robotic Process Automation), and IoT, Case Studies: Success Stories in Business Process Management

### **Unit 2: Change Management Foundations**

Concept and Nature of Change Management, Forces Driving Change in Organizations: Internal and External Factors, Models and Frameworks: Kotter's 8-Step Model, ADKAR, and Lewin's Change Model, Types of Organizational Change: Transformational, Transitional, and Developmental, Resistance to Change: Causes and Overcoming Strategies, Case Studies: Change Management in Large-Scale Enterprises

### **Unit 3: Integrating Process and Change Management**

Aligning Business Process Reengineering (BPR) with Change Management Goals, Strategic Planning for Process and Change Integration, Building Resilience and Agility Through Process Optimization, Leadership and Communication in Driving Process and Change Initiatives, Change Management in the Context of Digital Transformation and Industry 4.0, Case Studies: Blending BPM and Change Management for Success

### **Unit 4: Advanced Topics in Process and Change Management**

Organizational Culture and its Impact on Process and Change Management, Employee Engagement, Team Building, and Empowerment in Change Initiatives, Sustainable Change and Green Process Management Practices, Measuring the Success of Change and Process Initiatives: Metrics and KPIs, Emerging Trends: Agile Change Management, Hyper automation, and Data-Driven Processes, Case Studies: Lessons from Successful and Failed Change Initiatives

### **Reference Books:**

- Michael Hammer and James Champy - "Reengineering the Corporation: A Manifesto for Business Revolution", Harper Business.
- John Kotter - "Leading Change", Harvard Business Review Press.
- Jeff Hiatt - "ADKAR: A Model for Change in Business, Government, and Our Community", Prosci Learning Center Publications.
- Thomas H. Davenport - "Process Innovation: Reengineering Work Through Information Technology", Harvard Business Review Press.
- Harold Kerzner - "Project Management: A Systems Approach to Planning, Scheduling, and Controlling", Wiley.
- Lon Roberts - "Process Reengineering: The Key to Achieving Breakthrough Success", Quality Press.
- Eric Kimberling - "The Ultimate Guide to ERP Systems and Digital Transformation".

## **Service Operations Management**

**Credits - 3**

**Course Objectives:**

1. Understand the nature, scope, and unique characteristics of service operations management.
2. Analyze customer behavior, expectations, and perceptions to enhance service system design and delivery.
3. Develop strategies for service design, pricing, positioning, and quality management.
4. Explore service operations planning, scheduling, and the role of technology in service delivery and customer relationship management.

**Course Outcomes:**

Upon successful completion of the course the student should be able to:

1. Describe the nature and scope of services operations
2. Assess the customer considerations and behavior in designing service systems.
3. Identify the unique challenges of service operations.
4. Formulate appropriate strategies for service sector promotion and distribution strategies.

**Unit 1: Introduction to Services Management**

Service economy – evolution and growth of service sector – nature and scope of services – characteristics – classification – service market potential – expanded marketing mix for services – service quality – introduction to gaps model and SERVQUAL dimensions.

**Unit 2: Assessing service marketing opportunities**

Customer expectations and perceptions of services – customer behaviour specific to usage of services, Aggregate Capacity Planning for Services; Facility Location; subjective and objective factors.

**Unit 3: Service Design**

Levels of service product – Service life cycle – new service development – service blueprinting – physical evidence and servicescape – competitive differentiation of services – service positioning strategies – developing positioning maps – pricing of services – methods and specific issues.

**Unit 4: Service Delivery**

People in services – service process- distributing service direct distribution, channel function, channels selection, impact of information technology – designing communications mix for promoting services – building service customer relationships and service recovery – role of internal marketing in service delivery.

**Unit 5: Determinants of Quality in Services**

Measurement, control and improvement of Quality of Services; Concept of a Total Quality Service, Dynamics of Service Delivery System. Scheduling for Service operations, personnel and vehicles.

**Text Book:**

- Robert Johnston, Graham Clark, Michael Shulver; Service Operations Management; Improving Service Delivery, Pearson Education; 4th Edition



**Reference Books:**

- James Fitzsimmons, Mona Fitzsimmons; Service Management: Operations, Strategy, Information Technology; McGraw Hill Education, 7th edition
- Richard B. Chase, Nicholas J. Aquilano; Operations Management for Competitive Advantage; Irwin Professional Pub, 10th edition.

## **Logistics Planning and Management**

**Credits - 3**

**Course Objectives:**

1. Understand the fundamental role of logistics in organizations and its broader impact on the economy.
2. Analyze the interdependencies of logistics with other organizational functions and the supply chain.
3. Evaluate logistics systems using various analytical approaches for optimization and efficiency.
4. Develop and implement effective service response logistics strategies to enhance service quality and operational performance.

**Course Outcomes:**

Upon successful completion of the course the student should be able to:

1. Assess the crucial role of logistics in an organization and economy at large.
2. Analyze the linkages of logistics with other functions of the organizations.
3. Examine the logistics systems by deploying comprehensive approaches.
4. Design and implement service response logistics.

**Unit 1**

Context of Logistics: Introduction, definitions, logistics in the economy, a macro perspective, aim of logistics, activities of logistics, value added role of logistics.

**Unit 2**

Logistics in the firm: Micro dimensions of logistics, interface with operations, manufacturing, marketing, supply chain, Problems with fragmented logistics, integrating logistics within an organization, integrating logistics along the SC.

**Unit 3**

Approaches to analyzing logistics systems: Materials Management v/s physical distribution, Cost centers, nodes v/s links, logistics channel, cost perspective & level of optimality, short run or static analysis, long run or dynamic analysis.

**Unit 4**

Logistics Relationships: Types of relationships, Competitive relationship, product relationship, spatial relationship, intensity of involvement, logistics outsourcing activities –concept & types of 3PL, 4PL, need for collaborative relationships.

**Unit 5**

Response Logistics: Overview of service Operations – service productivity, global service issues, service strategy development, service delivery systems, service location & layout, primary concerns of service response logistics –service capacity, waiting times, distribution channels service quality

**Text Book:**

- John Joseph Coyle, C. John Langley, Robert A Novack, Brian Gibson, Supply Chain Management : A Logistics Perspective, Cengage Learning, Inc, 9th edition

**Reference Books:**

- Edward J. Bardi, C. John Langley, John Joseph Coyle, The management of Business Logistics – A supply Chain Perspective, South-Western, 7th edition
- Donald Bowersox , David Closs, M. Bixby Cooper, Supply Chain Logistics Management , McGraw-Hill Education / Asia, 3rd edition.

## **Procurement and Supplier Relationship Management**

**Credits - 3**

**Course Objectives:**

1. Understand the role and significance of procurement in supply chain management.
2. Analyze and implement various sourcing strategies for effective supplier selection and management.
3. Develop supplier evaluation criteria to ensure quality and performance in procurement processes.
4. Apply negotiation techniques and contract management strategies to optimize procurement outcomes.

**Course Outcomes:**

Upon successful completion of the course the student should be able to:

1. Understand the scope and utility of purchase in supply chain management
2. Examine and evaluate various type of sourcing strategies
3. Design and ensure criteria for supplier quality evaluation and management
4. Identify the criticality of negotiation and other techniques in contracts management

**Unit 1**

Introduction to purchasing and supply chain management, the purchasing process, Purchasing Policy and Procedures, Purchasing Objectives, Responsibilities of Purchasing, Types of Purchases, Improving Purchase Process, Purchasing Procedures, Policy Overview.

**Unit 2**

Organizing the Purchasing Function: Purchase Function Position Within the Organization Structure, Factors affecting Purchasing's Position, Reporting of Purchasing function, Organizing of Purchasing, Separating Operational & Strategic Purchasing, Advantages & Disadvantages of centralized, decentralized Purchasing, Hybrid Purchasing Structure.

**Unit 3**

Strategic Sourcing – Supplier Evaluation & Selection: Linking Purchasing and Corporate Strategy, Translating Corporate Objectives into Purchasing Goals, Translating Purchasing Objectives into Purchasing Goals, Purchasing Strategy Development Process, Supply Base Optimization.

#### **Unit 4**

Critical Role of In-sourcing / Outsourcing, The In-sourcing / Outsourcing Decision Process, Make or Buy, Supplier Evaluation and Selection Process, Need for Supplier Selection, Identifying key sourcing requirements, Evaluation and Selection, Key Supplier Evaluation Criteria, Overview of Supplier Quality Management.

#### **Unit 5**

Negotiation & Contracts Management: Objectives of negotiation, when to negotiate, the negotiation Process, Preparation, Establishing the Objectives, Dynamics of Negotiation, Phases in face-to-face negotiation, Negotiation Techniques, Types of Contracts – Fixed Price, Cost based / Indexation, Long term, Short term.

#### **Text Book:**

- Peter Baily, Barry Crocker , David Farmer, David Jessop, David Jones, Procurement and Principles Management, Pearson Education, 11th edition

#### **Reference Books:**

- Peter Baily, David Farmer , Barry Crocker , David Jessop , Procurement Principles and Management in the Digital Age, 12th edition
- CSCMP (Council of Supply Chain Management Professionals) , Wendy Tate, The Definitive Guide to Supply Management and Procurement: Principles and Strategies for Establishing Efficient, Effective, and Sustainable Supply Management Operations, Pearson Education

## **Warehouse Management**

**Credits - 3**

#### **Course Objectives:**

1. Understand the role and significance of warehousing in supply chain management, including evolving trends and technologies.
2. Analyze warehouse operations, processes, and human resource management for efficient functionality.
3. Develop skills in warehouse design, layout optimization, inventory control, and cost management.
4. Explore the impact of IT, automation, and AI-driven technologies in enhancing warehouse efficiency and decision-making.

#### **Course Outcomes:**

Upon successful completion of the course the student should be able to:

1. Understand the scope of warehousing in supply chain management
2. Examine the role of human resource in ensuring smooth warehousing operations
3. Design a functional warehouse for efficient operations

#### 4. Appreciate the role of IT / ITES tools in enhancing the warehouse operations

##### **Unit 1**

Supply chain management and warehousing, Concept of Warehouse: Introduction, Objectives, meaning of a Warehouse, Need for warehousing management, Evolution of warehousing, e-fulfilment and its impact on warehouse, Cold storage and refrigerated warehouses, Energy management, material handling and storage issues.

##### **Unit 2**

Role of warehouse managers, issues and challenges faced by the manager, people management, warehouse processes: receiving and put away, cross docking, quality control; pick preparation, strategies and equipment, order picking method, warehouse processes from replenishment to dispatch.

##### **Unit 3**

Warehouse management systems, warehouse layout, storage and handling equipment, Merchandise Management System: Introduction, Objectives, Meaning of Merchandise Management System, Organisation Structure in Merchandise Management, Warehousing Function Model.

##### **Unit 4**

Warehouse Structure, Warehouse Operations, receiving inventory, picking inventory, locating inventory, Organising inventory, Despatching inventory, Equipment Used for a Warehouse. Inventory Cost and Service, Lead Time, Management of Stock Levels, Replenishment Methods, Concept of Inventory Control, Impact of Stock Inaccuracy, Frequent Stock Checking, Security and Preventing Loss.

##### **Unit 5**

Warehouse information: Introduction, Objectives, Importance of Warehouse Information, Decision Making Using Warehouse Information, ICT Applications in a Warehouse, Technology Aids in Retail warehouse Management: Introduction, Objectives, Barcode Scanners, Wireless LAN, Mobile Computers, Radio Frequency Identification (RFID). Role of Artificial Intelligence in Warehouses.

##### **Text Book:**

- Villivalam Rangachari Rangarajan, Basics of Warehouse and Inventory Management, Notion Press

##### **Reference Books:**

- Chen Han, Design and Process Optimization in Warehousing Logistics , VDM Verlag
- Gunay Banihan, Fundamentals of Warehousing - With Worked Examples, New Generation Publishing.

## **Sustainable Supply Chain Management**

**Credits - 3**

**Course Objectives:**

1. Understand the fundamental concepts, frameworks, and importance of sustainability in supply chain management.
2. Analyze sustainable supply chain strategies, circular economy principles, and their impact on operations and product development.
3. Explore lean manufacturing, Six Sigma, and other techniques to enhance sustainability in production systems.
4. Examine sustainable practices in outbound and reverse logistics, including carbon footprint reduction and waste management.

**Course Outcomes:**

Upon successful completion of the course the student should be able to:

1. Understand the conceptual frameworks of sustainability
2. Examine techniques of sustainable supply chain management
3. Design and implement techniques to ensure sustainability in production and operations system
4. Incorporate the sustainability principles in circular economy, reverse and outbound logistics

**Unit 1**

Introduction to sustainability, Triple Bottom Line, The development of sustainable objectives from the Triple Bottom Line perspective: Profit, Planet, People, Sustainable development, Sustainable development and corporate social responsibility, Overview of sustainable supply chain management, Why sustainable supply chain management, Foundation of sustainable supply chain.

**Unit 2**

Sustainable Supply Chain Management as competitive marketing strategy, Strategic Alignment, Operational performance and decision making, control of operations, Framework for sustainable supply chain operations.

**Unit 3**

Sustainability and new product development, role of circular economy, Circular economy definitions, Principles of circular economy, Components of circular economy, Circular economy business models.

**Unit 4**

Sustainability and Types of production system, Lean management for sustainable production, the lean manufacturing principles and tools, Comparison of conventional manufacturing and lean Manufacturing, Lean manufacturing: advantages and limitations for sustainable production, Exploring role of six sigma and statistical process control for sustainable production.

**Unit 5**

Sustainability and outbound logistics, packaging and physical distribution from triple bottom line perspectives, A reference framework for carbon footprint auditing and reducing transport waste.

**Unit 6**

Sustainability and reverse logistics, Comparison of forward and reverse logistics, integrating forward and reverse logistics, reverse logistics drivers, barriers, and disposition options, 6 R and sustainability, Measuring sustainability.

**Text Book:**

- Heizer John, Operations Management - Sustainability and Supply Chain Management, Pearson Education India, 12th edition.

**Reference Books:**

- Cetinkaya Balkan, Sustainable Supply Chain Management, Springer-Verlag Berlin and Heidelberg GmbH & Co. KG
- Govindasamy Vengadasan, Sustainable Supply Chain Management Practices, LAP Lambert Academic Publishing.

## **International Logistics Management**

**Credits - 3**

**Course Objectives:**

1. Understand the role and significance of international logistics in global trade and supply chain management.
2. Analyze the impact of external factors, including political, economic, and environmental risks, on global logistics operations.
3. Explore various modes of international transportation, intermodal logistics, and strategic decision-making in global supply chains.
4. Examine trade regulations, international contracts, INCOTERMS, and best practices in global inventory and distribution management.

**Course Outcomes :**

Upon successful completion of the course the student should be able to:

1. Assess the crucial role of international logistics in global trade.
2. Analyze the linkages of logistics with external environment factors
3. Understand the international terms of trade
4. Design and measure performance parameters to ensure control of logistics operations

**Unit 1**

Concept, Evolution and Development, Importance of logistics management in international business, International Logistics: functions and intermediaries. Issues involved in movement of goods, global supply chain of electronics, global supply chain of pharmaceutical industry and other sectors.

**Unit 2**

Global risks in supply chain management, Political risks, Economic instability, Environmental risks, Social environment, Cyber-attacks, Pandemics. Interruptions in global supply, Sectoral analysis of risks in supply chain, Managing risks in global supply chain particularly during lockdowns.

**Unit 3**

Strategic importance of transport in global logistics, logistical objectives of transport, International Ocean Transportation, International Air Transportation, and International Land Transportation: types, characteristics and salient features, intermodal transportation in international operations, factors influencing mode and carrier selection decision.

#### **Unit 4**

Global trade environment: various trade blocks / FTZ and their impact on supply chain management, Customs and Regulations, Trade Documentation, International Contracts, Terms of Trade, Term of Payment, International Currency, INCOTerms, Logistical packaging, containerization, procurement, warehousing and material handling, approaches to Inventory Management and distribution in Global Supply Chain Management.

#### **Text Book:**

- Sudalaimuthu S. Logistics Management for International Business, Prentice Hall of India Ltd.

#### **Reference Books:**

- Branch Alan E., Global Supply Chain Management and International Logistics, Taylor & Francis Ltd.
- Long Douglas, International Logistics: Global Supply Chain Management, Springer-Verlag New York Inc.

## **Production Planning and Control**

### **Credits - 3**

#### **Course Objectives:**

1. Understand the principles, functions, and significance of production planning and control in manufacturing and service industries.
2. Apply forecasting techniques and inventory management strategies to optimize resource utilization.
3. Explore modern production planning methodologies, including MRP, ERP, JIT, and Line of Balance, for efficient operations.
4. Develop strategies for capacity planning, scheduling, and assembly line balancing to enhance production efficiency.

#### **Course Outcomes:**

Upon successful completion of the course the student should be able to:

1. Apply principles and techniques in the design, planning and control of these systems to optimise/make best use of resources in achieving their objectives.
2. Ability to measure the effectiveness, identify possible areas for improvement for production and service systems.
3. Ability to acknowledge latest developments in the PPC domain, and adopt them to existing systems.
4. Ability to lead various departmental resources to achieve streamlining of PPC systems.

#### **Unit 1**

Introduction : Definition – Objectives of production Planning and Control – Functions of production planning and control – Elements of production control – Types of production – Organization of production planning and control department – Internal organization of department.

### **Unit 2**

Forecasting – Importance of forecasting – Types of forecasting, their uses – General principles of forecasting – Forecasting techniques – qualitative methods and advanced quantitative methods, Inventory management – Functions of inventories, relevant inventory costs, Advanced EOQ models, Inventory control systems.

### **Unit 3**

Introduction to MRP & ERP, LOB (Line of Balance), JIT inventory, and Japanese concepts, Routing, Loading, Scheduling, Standard scheduling methods,

### **Unit 4**

Assembly Line Balancing, Aggregate planning, Capacity Planning, Expediting, Dispatching, types of follow up, applications of computers in production planning and control.

### **Text Books:**

- Elements of Production Planning and Control / Samuel Eilon.
- Modern Production/ operation managements / Baffa and Rakesh Sarin

## **Total Quality Chain Management**

**Credits - 3**

### **Course Objectives:**

1. Understand the fundamental principles of quality management and the contributions of quality pioneers.
2. Apply statistical quality control techniques, including control charts and process capability analysis.
3. Implement Six Sigma, ISO standards, and quality improvement tools to enhance operational excellence.
4. Utilize benchmarking, Quality Function Deployment (QFD), and Total Productive Maintenance (TPM) for continuous improvement.

### **Course Outcomes:**

Upon successful completion of the course the student should be able to:

1. Assess the importance of Quality in an organization.
2. Describe the contributions on Quality by pioneers of the field.
3. Evaluate quality policy by applying relevant tools.
4. Deploy statistical quality control techniques.
5. Describe Quality Management Awards and frameworks.

### **Unit 1**

Introduction to Quality- Definition of Quality- product, user, value, and manufacturing-based perspectives, Dimensions of Quality, Quality Planning, Quality costs- optimization of quality



costs, seven tools of quality control; Philosophies of Quality Gurus- Deming, Juran, Crosby, Feigenbaum, Ishikawa, Taguchi. Comparison of Quality Philosophies.

### **Unit 2**

Statistical Process Control-Introduction to Quality characteristics variables and attributes, Types and causes of variations, Control Charts for variables and attributes, Process capability.

### **Unit 3**

Acceptance Sampling-Sampling process and lots formation; Advantages and applications of acceptance sampling; characteristics of O.C. Curve; Single, double, multiple, sequential sampling; ASN, ATI, AOQL, AOQ, AQL, LQL, Producer's and Consumer's risks.

### **Unit 4**

Six Sigma and ISO 9000:2000- Principles of Six Sigma, Statistical basis, Tools and techniques, DMAIC principle, application of six sigma in manufacturing and service organizations, structure of ISO standards, Factors leading to ISO, Implementation and registration, Benefits of ISO.

### **Unit 5**

Benchmarking – Reasons to Benchmark, Benchmarking Process, Quality Function Deployment (QFD) – House of Quality, QFD Process, Benefits, Taguchi Quality Loss Function, Total Productive Maintenance (TPM) – Concept, Improvement Needs, FMEA – Stages of FMEA.

### **Text Books:**

- Dale H. Besterfield, Carol Besterfield-Michna, Total Quality Management International Edition, 3/E, Pearson Education
- Adrian Wilkinson, Tom Redman, Ed Snape, Mick Marchington, Managing with Total Quality Management, Springer

### **Reference Books:**

- Paul Levy, Total quality management in the supply chain, Springer
- Terry Richardson, Total Quality Management, Cengage Learning
- Stephen George, Arnold Weimerskirch, Total Quality Management: Strategies and Techniques, Pearson Education.

# **Area Finance**

## **Investment Management**

**Credits - 3**

### **Course Objectives:**

1. To help explore the theory and practice of investments, covering areas like capital market structure, valuation, security analysis and portfolio management
2. To help understand the economic forces that influence the pricing of financial assets.
3. To understand and evaluate portfolio selection techniques

### **Course Outcomes:**

Upon successful completion of the course the student should be able to:

1. Understand the key concepts in investment management, including risk and return, market efficiency, and asset allocation.
2. Analyze different types of securities (equities, bonds, derivatives) and apply valuation techniques to determine their intrinsic value.
3. Understand and apply portfolio theory, including the concept of efficient frontiers and optimal portfolio construction.
4. Implement strategies for asset allocation and diversification to construct and manage investment portfolios that align with client or institutional objectives.

### **Unit 1: Introduction**

Investment: Objectives, investment methods – Vehicles of Investments: Security and non-security forms of investment, Concept and measurement of Risk: Diversifiable and Non-diversifiable. Investment Environment-Functioning of stock exchanges, trading and settlement procedures at NSE & BSE. SEBI and Market Regulations, Efficient Market Hypothesis.

### **Unit 2: Security analysis**

Fundamental analysis; Concept and measurement of intrinsic value, Company- Economy-Industry Analysis, Technical analysis – Charting the price behavior, identification of indicators and oscillators, outliers, Share price and trading volume; trend analysis, sentiment indicators.

### **Unit 3: Analysis and valuation of bonds**

Types of bonds, Term structure of interest rate, Bond yields, pricing theorems, , default risk analysis, determination of yield curves, YTM – Concept of Duration and immunization strategies, Managing bond portfolios: Immunization and active management.

### **Unit 4: Portfolio Management**

Portfolio design: Asset allocation decision, risky & risk free assets-Utility analysis, Traditional and Modern Portfolio theory, Markowitz diversification model, selecting an optimal portfolio – concept and evaluation techniques Introduction to Alternate Avenues of Investment.

### **Text Books:**

- Jordan & Fischer , Investment Analysis and Portfolio management — ( latest edition)
- Zvi Bodie, Kane, Marcus & Mohanty, Investments — TMH – (latest edition).

**Reference Books:**

- Martin J. Pring, Martin Pring's Complete Guide to Technical Analysis An Indian Perspective, Shroff
- Robert Haughen, Modern Investment Theory, Pearson.
- Frank K. Reilly, and Keith C. Brown, Investment Analysis and Portfolio Management, 8th Edition, Thomson, 2012.
- Rajiv D. Khatalawala, How to profit from Technical Analysis, Vision Books.
- Aswath Damodaran, Damodaran on Valuation, 2ed Paperback – Wiley.
- Graham, Dodd and Kottle, Security Analysis, McGrawHill

## **Investment Banking and Financial Services**

**Credits - 3****Course Objectives:**

1. Analyse factors that influence the equity market and their analysis. Understand differences between equity and bond markets, and assess how factors impact bond markets.
2. Understand and analyse investment banking functions, including underwriting and Initial Public Offerings (IPOs).
3. Students should be able to understand various type of financial services and their intricacies
4. Understand legal and regulatory compliance, risk management, and back-office functions in financial services

**Course Outcomes:**

1. Analyze IPO processes, secondary market factors, and their impact on market liquidity and volatility.
2. Evaluate corporate valuation methods and assess the influence of global and Indian economic indicators on stock market performance.
3. Analyze fixed income markets, credit fundamentals, pricing, and rating agency roles.
4. Understand investment banking functions and key financial services like leasing and housing finance.
5. Apply knowledge of compliance, ethics, risk management, and back-office operations in financial markets

**Unit 1: Essentials of the Equity/Stock Market**

The new issue market/Initial Public Offerings (IPOs) - Publicly Traded Markets: Factors affecting the secondary trading market, stock exchanges, market indices, liquidity and volatility - Corporate effects on stock pricing, price/earnings ratios, book value, valuation based on expectations vs historical reporting - External and international economic effects on stock market values, liquidity and volatility - Fundamentals of stock market technical analysis - Private Equity/Venture Capital and Direct Investment – Key Global and Indian economic indicators for stock market and their impact – Impact of inclusion/exclusion of stocks in global indices – Emerging structure of companies and rationale.

**Unit 2: Essentials of the Fixed Income/Bond Market**

Differences between stocks/equity and bonds/credit markets -Fundamentals and mathematics of the credit, fixed income/bond market -Corporate credit and economic impacts on bond markets, interest rates, yields and credit pricing spreads, Investment Grade vs Non Investment Grade (High Yield/Junk Bonds) -Fundamentals of the workings of the credit markets - Convertible Bonds and Asset Backed Securities -Trading, Positioning, Underwriting and Distribution – Credit Rating, Rating Agencies.

### **Unit 3: Investment Banking & Financial Services**

Underwriting, Initial Public Offers. Rights Issues and Secondary Public Offers, Public Offers of Debt Securities, Overseas Capital Market Issues. Exit Offers - Financial services: Leasing, hire-purchase, consumer finance, housing finance.

### **Unit 4: Legal/Regulatory Compliance**

Risk Management and Back Office -Ethics, insider trading, corporate governance, fiduciary responsibilities - Compliance and Regulatory Environment - Credit, Market, Operations/Processing Risk Management -Documentation, Transaction Processing, Financial Control and Reporting.

#### **Text Books:**

- Subramanyam, Pratap, Investment banking Tata McGraw-Hill.
- Joshua Rosenbaum & Joshua Pearl, Investment Banking: Valuation, Leveraged Buyouts, and Mergers and Acquisitions, MISL-Wiley

#### **Reference Books:**

- Michel Fleuriot, Investment Banking Explained: An Insider's Guide to the Industry (Professional Finance & Investment), McGraw-Hill Education
- Matthew Kantz and Robert R. Johnson, Investment Banking for Dummies, John Wiley and Son
- Aswath Damodaran, Investment Valuation: Tools and Techniques for Determining the Value of any Asset, University ed, 3ed Paperback, Wiley.
- Dun and Bradstreet, Wealth Management, Tata Mc. Graw Hill

# **Financial Markets and Institutions**

**Credits - 3**

## **Course Description:**

The basic purpose of this course is to develop a broad understanding of the various markets comprising the Indian Financial System in a global context and the roles played by various institutions in the functioning of this system. In addition, the course will examine the present status and developments that are taking place in the financial services sector and develop an integrated knowledge of the functional areas of the financial services industry in the real-world situation.

## **Course Outcomes:**

1. Gain a comprehensive understanding of the financial system and its components.
2. Analyze the functioning of financial markets, including money market, capital market in India.
3. Develop an understanding of financial instruments, financial services and current developments in the financial services sector.
4. Analyze interest rate determination and its impact on financial markets.

## **Unit 1 :Introduction to Financial System**

Overview of Financial System - Financial Markets, Institutions and Financial Instruments, Nature and Role of Financial System, Structure of Indian Financial System, Major Financial Sector Reforms, Linkages between Economy and Financial Markets, Regulatory Institutions in India- SEBI and its Role as Regulator in Indian Financial Market.

## **Unit 2: Financial Markets**

Introduction to Financial Markets: Role and Importance, Working of Equity/Stock Market, Constituents of Depository System, Functions of Depository; Dematerialization and Rematerialization process, Depositories in India. Capital Market – Primary and Secondary Market; Bond Market - Government Bonds and Corporate Bond market, Money Market, Treasury Bills Market, Call Money Markets, Market for Commercial Paper, Commercial Bills and Certificate of Deposit, Market for Government Securities. Financial Intermediaries and Financial Service- Depository and Non-Depository Institutions (NBFCs), Banking Institutions, MFIs, Pension Funds, Mutual Funds, and other Financial Services.

## **Unit 3: The Insurance Industry**

Role in financial markets, Importance in risk management, Types of Insurance-Life Insurance: Term, Endowment, ULIPs; General Insurance: Health, Motor, Property Reinsurance, Regulatory Framework, Role of IRDAI, Key regulations and compliance, Insurance as a Financial Instrument, Wealth protection.

## **Unit 4: Interest Rates, and the Role of Fintech**

Maturity and Term Structure of Interest Rate, Yield Curve, Impact of Interest Rate changes on Financial Markets. Introduction to Fin tech & need for digital disruption, Fintech -Global Perspective, SMAC Model, Fintech Infrastructure & Role of NPCI & RBI, Digital Payments.

## **Text Books:**

- Mishkin, F.S. & Eakins, E. (2018). Financial Markets & Institutions (9th ed.). Pearson Education.

- Pathak, B. Indian Financial System. (2018) (4 th ed.) (5 th ed.) Pearson Publication Markets, Institutions and Services), Pearson Education

#### **Reference Books:**

- Bhole, L. M.and; Mahakud, J. (2017). Financial Institutions and Markets (6 th ed.). Delhi: McGraw-Hill Education.
- Fabozzi, F. J., Modigliani, F. P Jones, and F. J. (2010). Capital Markets –Institutions and Instruments (4 th ed.). Delhi: PHI Learning.
- Madura, J. (2016). Financial Markets and Institutions. (!2th ed.). USA:Cengage Learning
- Mankiw, N. G., & Ball, L. M. (2010). Macroeconomics and the Financial Systems. USA: Worth Publishers.
- Saunders, A. & Cornett, M. (2018).Financial Institutions Management (9<sup>th</sup> ed.). McGraw-Hill Publishing Company.
- Saunders, A. & Cornett, M. (2014). Financial Markets and Institutions (6<sup>th</sup> ed.). McGraw Hill Education.
- Vij, M and ; Dhawan, S. (2018).Merchant Banking and Financial Services (2<sup>nd</sup> ed.). India: McGraw Hill Education (India) Private Limited.

## **International Financial Management**

**Credits - 3**

#### **Course Objectives:**

1. To develop an understanding of international financial instruments, foreign exchange markets, and institutions
2. To provide a detailed understanding of international finance theory (exchange rate determinants, foreign exchange exposure, foreign exchange exposure, interest rate parity etc.)
3. To develop knowledge, capability and skills necessary for making sound financial decisions for a multinational firm.

#### **Course Outcomes:**

Upon successful completion of the course the student should be able to:

1. Understand and analyze the impact of exchange rates, currency markets, and international capital flows on multinational companies.
2. Evaluate international investment opportunities and financial risks using quantitative tools and economic theories.
3. Develop strategies for managing foreign exchange risk, including hedging techniques and financial instruments.
4. Analyze and apply financial strategies to manage capital structure, financing, and working capital for multinational corporations.

#### **Unit 1: Introduction**

International financial Environment- Importance, rewards & risk of international finance- Goals of MNC- International Business methods–Exposure to international risk- International Monetary system- Multilateral financial institution-Government influence on exchange rate. International flows of funds- Balance of payments, International Trade flows, International

Capital Flows, Equilibrium, disequilibrium & adjustment of Balance of payment & Trade deficits.

### **Unit 2: International Financial Markets**

Foreign exchange markets-foreign exchange trading-Cash & Spot exchange markets-foreign exchange rates & quotation- forward markets-Exchange rate Behavior-Cross Rates-Foreign exchange market participants-arbitrage profit in foreign exchange markets, Swift Mechanism.

### **Unit 3: Foreign Exchange exposure and Foreign exchange risk Management**

Measuring exchange rate movements-Exchange rate equilibrium – Factors effecting foreign exchange rate forecasting exchange rates- international parity relationship: interest rate parity, purchasing power parity & fisher effects. Management of Transaction exposure- Management of Translation exposure- Management of Economic exposure-Management of political Exposure- Management of Interest rate exposure. Hedging against foreign exchange exposure – Forward market- Futures Market- options Market- Currency Swaps-Interest rate Swap- Cross currency Swaps.

### **Unit 4: International Investment decision**

International Capital Budgeting: Concept, Problems associated, Evaluation of a project, Risk Evaluation, and Impact on Value. Foreign Direct investment –Foreign portfolio investment- International Financial instruments, International Bond & Equity market, sovereign risk.

#### **Text Books:**

- P.G. Apte-International Finance Management- ( Tata McGraw Hill),4/e
- Levi, Maurice, International Finance , New York, McGraw Hill Inc., latest edition

#### **Reference Books:**

- Eun & Resnick – International Finance Management ---(TataMcGraw Hill), 4/e
- Jeff Madura, International Finance Management ---(Thomson), 7/e,2004
- Sharan Vyuptkesh, International Financial Management 6th Edition, PHI
- Thummuluri Siddaiah, International Financial Management, Pearson Education India.

## **Corporate Mergers, Acquisitions & Restructuring**

### **Credits - 3**

#### **Course Objectives:**

1. The objective of the course is to develop a comprehensive understanding of mergers and acquisitions and restructuring from the perspective of the corporate executive.
2. To develop skills necessary to evaluate and make decisions in a practical scenario
3. They develop an understanding of the merger and acquisition process, including types of mergers, significant theories, merger process, the regulatory framework in India, methods of restructuring, and different valuation approaches.

#### **Course Outcomes:**

Upon successful completion of the course the student will be able to:

1. Understand the different types of M&A transactions and the factors driving them.

2. Apply financial and strategic analysis techniques for evaluating M&A opportunities.
3. Evaluate the legal, regulatory, and ethical considerations in M&A deals.
4. Manage the post-merger integration process to ensure successful deal outcomes.

### **Unit 1: Introduction to Mergers**

Nature of acquisitions and amalgamations. types of merger – motives behind mergers – theories of growth of the firms and organic, inorganic growth strategies – value creation in horizontal, vertical and conglomerate mergers – internal and external change forces contributing to M & A activities A strategic perspective- industry life cycle and product life cycle analysis in M&A decision, strategic approaches to M&A- SWOT analysis, BCG matrix, Porter's Five forces model.

### **Unit 2 :Merger Process and Regulatory Framework**

Legal and regulatory framework of M & A – provisions of Companies Act 2013, Indian Income Tax act 1961 – SEBI takeover code, Provisions of Competition Act. Dynamics of M&A process; identification of targets and process of due diligence, preparation of due diligence report, deal restructuring. Process of merger integration – organizational and human aspects –managerial challenges of M & A.

### **Unit 3: Financing & Valuation of M&A**

Valuation approaches : discounted cash flow valuation , relative valuation , valuing operating and financial synergy , valuing corporate control; cash offer, share exchange ratio.The role of private equity firms in M&A, Equity financing and IPOs in the context of M&A.

### **Unit 4s: Corporate Bankruptcies and Corporate restructuring**

Concept of Bankruptcy, Different methods of restructuring – joint ventures – sell off and spin off – divestitures – equity carve out – leveraged buy outs (LBO) – management buy outs – master limited partnerships – employee stock ownership plans (ESOP), Going Private.

#### **Text Books:**

- Patrick Gaughan, Mergers, Acquisitions and Corporate Restructurings, John Wiley.
- Donald DePamphilis , Mergers and Acquisitions Basics, Elsevier

#### **Reference Books:**

- Mergers acquisitions and Business valuation
- Ravindhar Vadapalli–Excel books, 1/e 2007
- Ashwath Damodaran – Corporate Finance-Theory and Practice–John Wiley & Sons.
- S. F. Reed, A. R. Lajoux and H. Peter Nesvold The Art of M&A, Fourth Edition: A Merger Acquisition Buyout Guide, Mc Graw Hill Education.



# **Financial Derivatives and Risk Management**

## **Credits - 3**

### **Course Objectives:**

1. To develop a basic understanding of the terminology and conceptual framework of financial derivatives and derivative market.
2. To understand financial derivatives like futures, forwards options and swaps as important tools to manage assets, portfolios and financial risks.
3. To understand pricing and valuation of financial derivatives.

### **Course Outcomes:**

Upon successful completion of the course the student will be able to:

1. Understand the mechanics of various financial derivatives (options, futures, forwards, swaps) and their role in financial markets.
2. Identify and quantify different types of financial risks (market, credit, operational, and liquidity).
3. Apply derivative instruments in hedging strategies to manage and mitigate risk exposure.
4. Use risk management techniques, including Value-at-Risk (VaR), stress testing, and scenario analysis, to evaluate and manage portfolio and enterprise-wide risk.

### **Unit 1: Introduction to Financial Derivatives**

Forwards, futures, options, swaps and other derivative instruments. Basics of hedging credit, currency and interest rate risks -Difference between hedging and speculation -Hedge Funds vs Mutual Funds. Derivatives Market Regulation and Ethics

### **Unit 2: Forwards and Futures**

Organisation and structure, trading mechanism, cost of carry model, Determination of forward and future prices: Pricing of futures and forwards on investment assets, commodities, currencies and interest rate. Hedging Strategies using Forwards and Futures

### **Unit 3: Options fundamentals:**

Building Blocks, calls, puts, and underlying; Basic Option Pricing: European options, American options, forward-spot parity, put call parity, Option Greeks, the binomial option-pricing model. Binomial and Black-Scholes Option Valuation, Hedging strategies using Options: Option Positions and Strategies, Construction of option strategies in various market situations and their pay off; Betting on a large price decrease, betting on a small price increase.

### **Unit 4 : Risk Management using Derivatives**

Objective of Risk management, Identifying types of risk, Quantifying risk and Hedging techniques, Credit default swaps, Total return swaps, Credit spread options, Collateralized debt obligation, Introduction to VaR.

### **Text Book:**

- John C.Hull Options Futures & Other Derivatives- - (Pearson Education), latest edition
- Vohra; Futures and Options, Mc GrawHill Education.

### **Reference Books:**

- Introduction to Derivatives and Risk Management – Chance –Thomson Learning, latest edition.
- Merton H. Miller, Merton Miller on Derivatives, Wiley
- Robert W Kolb, Futures, Options and Swaps — Blackwell Publishing.

## **Financial Modeling and Forecasting**

**Credits - 3**

### **Course Objectives:**

1. To acquaint students with Financial Modeling and basics of Econometrics
2. To equip students in the application of appropriate methods in managerial problem solving and decision making
3. To develop models in different areas of finance including investments, corporate finance and derivatives

### **Course Outcomes:**

Upon successful completion of the course the student will be able to:

1. Gain an in-depth understanding of how to build robust and dynamic financial models.
2. Use statistical models like regression and ARIMA to accurately forecast financial trends
3. Utilize financial models for equity research, risk assessment, and valuation.
4. Analyse and interpret data to provide meaningful information to assist in making management decisions
5. Use financial models to assess scenarios, risks, and optimize strategic decisions.

### **Unit 1: Techniques of Financial Data Analysis and Forecasting**

Multiple Regression models for financial data, Exponential Smoothing and ARIMA models for analysis and forecasting of financial data, ARCH, GARCH and EGARCH models for estimating asset price volatility and volatility forecasting.

### **Unit 2: Equity Research and Portfolio**

Measuring the systematic and non-systematic risk of assets using regression and Simulation, spreadsheet models for construction of portfolio of equity, options and futures. Portfolio performance, Equity and Bond Valuation.

### **Unit 3: Valuation Decisions**

Valuation models using valuation toolset-Comparable Companies Analysis, discounted cash flow analysis, sensitivity analysis, precedent transaction analysis, Valuation using Black-Sholes- Merton option pricing model, leasing v/s borrowing Decisions

### **Unit 4: Risk Measurement**

Financial Risk Models, Spreadsheets for Measuring Market risk, Value at Risk (VaR) calculation using Historical and Monte-Carlo simulation. Stress-testing, Back-testing. Altman Z score model, calculation of probability of default using equity prices.

### **Unit 5: Capital Structure Decisions**

Theories of capital structure – Relevance of Debt capital in the capital structure, EBIT-EPS analysis, Corporate Debt Capacity Management Decisions, Cost-volume-profit analysis under

conditions of uncertainty. Cost of capital, analyzing incremental after tax flows, forecasting futures cash flows, formulation and evaluation of alternative scenarios.

### **Text Books**

- Benninga, S. (2014), Financial Modeling, MIT Press, Fourth Edition.
- Winston, W. (2010), Financial Models Using Simulation and Optimization II, Palisade Corp.

### **Reference Books:**

- Damodaran, A. (2016). Damodaran on Valuation 2nd edition. Wiley.
- Damodaran, A. (2012). Investment Valuation: John Wiley.
- Brooks, C. (2008). Introductory Econometrics for Finance. Cambridge
- Bhalla, V.K. (2008). Investment Management. New Delhi: Sultan Chand

## **Data Analytics in Finance**

### **Credits - 3**

#### **Course Objectives:**

1. To acquaint students with tools for data analytics
2. To equip students in the application of analytics to traditional finance problems
3. To enable student to apply analytics tools in different areas of finance including investments, corporate finance and derivatives

#### **Course Outcomes:**

1. Upon successful completion of the course the student will be able to:
2. Perform ratio analysis, earnings forecasting, and evaluate earnings management models.
3. Use Excel for valuation, compute enterprise value, and analyze cash flow relationships.
4. Compute stock returns, portfolio means/variances, and apply CAPM and GMVP models.
5. Analyze bond duration, pricing with uneven payments, and apply term structure models.
6. Understand option strategies, apply Black-Scholes pricing, and calculate volatility and implied volatility.

### **Unit 1: Financial Statement Analytics**

Ratio analysis and forecasting, earnings management, Earnings Prediction Models

### **Unit 2: Valuation Analytics**

Valuation functions in excel, Discounting Using Dated Cash Flows. Computing Enterprise Value, Enterprise Value & Free Cash Flows, Consolidated Statement of Cash Flows.

### **Unit 3: Portfolio Analytics**

Computing Returns for stocks, Portfolio Means and Variances, Envelope Portfolios. Efficient Portfolios and the CAPM, Variance-Covariance Matrix, Correlation Matrix, Computing the

Global Minimum Variance Portfolio (GMVP), Sample Variance-Covariance, Using Option Information to Compute the Variance Matrix.

#### **Unit 4: Bond and Option Analytics**

Duration Patterns, Bond with Uneven Payments, Non-Flat Term Structures and Duration. Model of Immunization, Convexity. Term Structure, Fitting a Functional Form to the Term Structure - Basic Option Definitions, Option Payoff and Profit Patterns, Option Strategies, Option Arbitrage Propositions, Two-Date Binomial Pricing, The Black-Scholes Model, Black-Scholes Pricing Function, Calculating the Volatility, Implied Volatility, Dividend Adjustments to the Black-Scholes.

#### **Text Books:**

- Benett, M.J. &Hugen, D.L. (2016), Financial Analytics with R: Building a Laptop Laboratory for Data Science, Cambridge University Press.
- Pitabas Mohanty (2023), Financial Analytics, Wiley.

#### **Reference Books:**

- Lemieux, V.L. (2012), Financial Analysis and Risk Management: Data Governance, Analytics and Life Cycle Management, Springer.
- Van Deventer, D.R. & Imai, K. (1996), Financial Risk Analytics: A Term Structure Model Approach for Banking, Insurance and Investment Management, Irwin Professional Publishing.
- Ryzhov, P. (2013), Haskell Financial Data Modeling and Predictive Analytics, Packt Publishing.

#### **Suggested Reading:**

- Baesens, B., Rosch, D. &Scheule, H. (2017), Credit Risk Analytics: Measurement Techniques, Applications and Examples in SAS, Wiley.
- Sengupta, C. (2011), Financial Analysis and Modeling, Wiley.

## **Financing the Entrepreneurial Business**

**Credits - 3**

#### **Course objective:**

This course has been developed to provide students with an understanding of the financial aspects of starting, funding, operating, and exiting an entrepreneurial venture.

#### **Course outcomes:**

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

1. Understand the relation between entrepreneurial finance and value creation in a business.
2. Analyse the financial requirements of businesses and sources of finance for new ventures.
3. Develop Financial Projections for ventures.
4. Create a Financing Strategy for Entrepreneurial Venture.

### **Unit 1: Introduction**

Introduction: New Venture Financing, stages of new venture development, business plans, sources of financing, term sheets. Methods of Financial Forecasting: Forecasting for new companies, fundamental analysis, incorporating uncertainty. Choice of Financing - Financing alternatives, financial decision process, cumulative financing needs, financial distress.

### **Unit 2: Cash Flow Modeling & Investment Assessment**

Financial modeling for start-ups, incorporating uncertainty. Assessing Financial Needs – Sustainable growth, Break-even analysis, planning for rapid growth, scenario analysis, staged investing.

### **Unit 3: Valuation**

New Venture Valuation – Myths, discounted cash flow, RADR, CEQ, relative value, venture capital method, rates of return Valuation in Practice – Continuing value, multiples, estimating risk free, market risk premium & beta, applying RADR & CEQ. The Entrepreneur's Perspective on Value – Undiversified investors, partial-commitments, valuing partial commitment with RADR & CEQ.

### **Unit 4: Real Options, Deal Structure and Contract Design**

Real options: New Venture Strategy - Strategic planning, financial strategy, real vs. financial options, expansion & abandonment options, decision trees, game trees, game theory. Deal Structure – Outside investors, contracts, proportional risk sharing, asymmetric risk & return, subsidized investors, active investors, implementation & negotiation, informational issues. Contract Design: Value Creation & Contract Design - Staged investing, signaling beliefs, alignment of interests, valuation-based contracting. Legal entities

### **Text Books:**

- Burns, P. (2001). Entrepreneurship and small business. New Jersey:Palgrave.
- Entrepreneurial Finance, 2011, Janet Smith, Richard Smith, & Richard Bliss, Stanford University Press.

### **Reference Books:**

- Hisrich, R., & Peters, M. (2006). Entrepreneurship. New Delhi: TataMcGraw Hill.
- Holt, D. H. (2004). Entrepreneurship new venture creation. New Delhi:Prentice Hall of India.
- Kaplan, J. (2004). Patterns of entrepreneurship. Wiley.
- Mullins, J. W. (2006). New business road test. New Delhi: Prentice Hall.

# **Project Appraisal and Finance**

**Credits - 3**

## **Course Objectives:**

1. To acquaint students with the area of project finance
2. To help students to understand the demand, technical, risk and environmental analysis of different projects from financial perspective
3. To help students to build financial models for various kinds of projects
4. To help students in evaluating projects from the perspective of different stakeholders

## **Course Outcomes:**

Upon successful completion of the course the student will be able to:

1. Assess the project life cycle, resource allocation, and the role of proper resource management in project feasibility.
2. Identify target markets and use primary/secondary data to project demand through qualitative models
3. Evaluate technology selection, project location, and conduct environmental impact assessments, including social cost-benefit analysis
4. Prepare financial projections and assess the viability of projects through cost, profitability, and balance sheet estimates
5. Apply project appraisal methods and manage risks using appropriate valuation techniques and real options

## **Unit 1: An Overview of Project Finance**

Introduction to project finance and overview of the project finance market, project life cycle and its impact on the feasibility - The Importance of a Proper Allocation of Resources, Process of Resource Allocation at the Corporate Level, Process of Resource Allocation at the Business Unit Level, Generation of Project Ideas and Creativity.

## **Unit 2: Market And Demand Analysis**

Identification of the Target market, choice of the Market Strategy, Projection of Demand using Primary Data and Secondary Data, Projection of Demand using Qualitative Models.

## **Unit 3: Technical & Environment Analysis**

Selection of Appropriate Technology, Acquisition of Technology, Process of Procurement of Materials, Choice of a Good Location for the Project, Design of the Layout of the Facilities at the Project Site - Meaning of Environment and Pollution, Pollution Created by Different Industries, Environmental Regulations in India, Environmental Impact Assessment for Projects. Social Cost Benefit Analysis: The Rationale for SCBA, Different Approaches to SCBA.

## **Unit 4 : Financial projections & Valuing Projects**

The Cost of the Project, The Means of Finance, Estimation of Working Capital, Profitability Estimations, Balance Sheet Projections, Projections of Sources and Uses of Funds - Appraising a Project by Discounting and Non-Discounting Criteria, Appraising Projects with Special Features, FCF Approach, ERR Approach, Real Options – Issues in valuing long term projects, Managing Project Risks: How risk management creates value in project finance.

**Text Book:**

- Prasanna Chandra – Project Planning: Analysis, Selection, Implementation and Review – TMH, 5/e

**Reference Books:**

- Narendra Singh – Project Management and Control – HPH, 2003
- Nicholas – Project Management for Business and Technology: Principles and Practice- Pearson / PHI

## **Behavioural Finance**

**Credits - 3**

**Course Objectives:**

1. The course intends to enable students to understand the role of human behaviour in financial decision making and provide guidance on how to improve the financial decision making.

**Course Outcomes:**

Upon successful completion of the course the student should be able to:

1. Comprehend the difference between traditional finance and behavioural finance.
2. Analyze and identify behavioral biases and psychological characteristics influencing investor decision-making.
3. Develop strategies to mitigate the impact of behavioral biases on investment decisions and optimize portfolio performance.
4. Apply analytical skills for financial decision making.

**Unit 1: Introduction to Behavioral Finance**

Overview, History of behavioral finance, From standard finance to behavioral finance, Decision-making under risk and uncertainty, Limits to arbitrage, Fundamental Risk, Noise Trader Risk, Implementation cost, evidence of limits to arbitrage.

**Unit 2: Behavioral finance theories and anomalies**

Theoretical and empirical challenges to the EMH, Prospect theory, Bounded rationality, Expected Utility theory vs. prospect, Regret theory, Overreaction and underreaction, Illusion of control, Law of small numbers, Endowment effect: experiments. Sentiment and asset pricing. Market anomalies.

**Unit 3: Heuristics and behavioral biases**

Anchoring bias, Limited attention, Availability bias, Familiarity bias, Risk preference, framing bias, Mental accounting, Representativeness, Ambiguity aversion, Loss aversion, Regret avoidance, Cognitive dissonance, Conservatism, Self-attribution, Recency bias, Endowment effect, Status quo bias, Disposition effect, Herd Behavior, Hindsight, Self-deception, Overconfidence and excessive trading. Overcoming Behavioral Finance Issues- Strategies to guard against biases, De-risking strategy. Role of artificial intelligence in Behavioral Finance.

**Unit 4: Application of Behavioral Finance**

The Aggregate Stock Market: Equity Premium Puzzle-prospect theory, loss aversion; The Volatility Puzzle-beliefs; The Cross Section of Average returns size premium, long term reversals, event studies application, investor behavior (saving and investment)-insufficient diversification, naïve diversification, excessive trading, the selling decision, the buying decision.

**Suggested Readings:**

- Parikh (2011). Value Investing and Behavioral Finance. Tata Mcgraw Hill
- Singh, R. (2019). Behavioural Finance. PHI Learning
- Montier, J. (2007). Behavioural Investing: A Practitioner's Guide to Applying Behavioural Finance. Wiley Finance
- Chandra, P. (2020). Behavioral Finance, 2/E. McGraw Hill
- Montier, J. (2002). Behavioural Finance: Insights Into Irrational Minds and Markets.

## **Wealth Management and Financial Planning**

**Credits - 3**

**Course Objective:**

The Course in Wealth Management and Financial Planning intends to enable critical thinking in students with respect to analysis and application of innovative solutions to varied financial problems. This course would serve as a stepping stone for a prospective investment professional in the basic understanding of the wealth management concept.

**Course Outcomes:**

After studying this course, the student will be able to:

1. Understand the premise of wealth management and identify the financial goals.
2. Critically evaluate the investment instruments suitable for different financial goals in different time spans.
3. Apply appropriate financial instruments to manage individuals' finances.
4. Understand credit planning, retirement planning as well as estate planning.

**Unit 1: Introduction to Wealth Management**

Concept of wealth management, Wealth management vs. financial planning, Verticals of the wealth management, Wealth cycle, Process of wealth management plan, Components of a wealth management plan, Personal financial ratios to analyze the financial strength, Source of wealth, Trends of the wealth.

**Unit 2: Financial Planning & Investment Environment**

Financial planning process, Ascertainment of financial goals, Time value of money applications, building financial plans using spreadsheets, Rule of financial planning, Types of risks measuring risk, managing risk, Risk profiling and asset allocation, Risk return analysis, Inflation adjusted return and discount rate, CAGR in future and present value, Economic cycles and indicators.

**Unit 3: Investment Vehicles of Wealth Management**



Basic tenets of investments planning, Critical analysis of investment alternatives in financial plans- Bonds, Equity Shares, Mutual Funds, Fixed Deposits, PPF, IPO, NPS, Derivatives, SIP/ SWP/ STP and Index Funds, Commodity and energy markets, gold & bullion. Insurance and tax saving instruments, Risk analysis and insurance planning, Estate planning, Identification of durable competitive advantage of equity, Principles of value investing system

#### **Unit 4: Credit & Retirement Planning**

Assessment of credit, EMI: calculation, cost and benefit analysis, Reverse mortgage, Optimal use of education loan, Credit card management, Overdraft protection, Retirement need analysis techniques, Development of retirement plan, Retirement schemes, Hybrid plan, Group life and health insurance, Relationship of retirement planning with other financial goals.

#### **Suggested Readings:**

- Buffet. Marry and Clark. David. (2011). Warren Buffett and the Interpretation of Financial Statement.
- Fisher. A. Philip. (2010). Common Stocks and Uncommon Profits. Wiley.
- Graham, Benjamin. (2017). The Intelligent Investor, 6th Edition.
- Keown, A J. (2017). Personal Finance – Turning money into wealth. Pearson Publication.
- Madura, Jeff. (2016). Personal Finance, 6th Edition. Pearson

## **Area-Human Resource Management**

### **Industrial Relations & Labour Legislation**

**Credits - 3**

#### **Course Objectives:**

1. To demonstrate an understanding of the essential theories, models and practices of legal and ethical issues and how these are related to developing organizational policies, procedures and practices
2. To analyze core issues, policies and practices surrounding employee relations and legal issues
3. To evaluate the variety of forms that conflict in work organizations take with emphasis on conflict of interest
4. To differentiate between cooperation and management of conflict within an organization and provide strategic policies relating to the changes that occur in employer-employee relations.

#### **Course Outcomes:**

Upon successful completion of the course the student should be able to:

1. Describe the Labour Laws and Legal Framework of Industrial Relations.
2. Assess the rationale of labour laws in organizations.
3. Examine the labour laws in India viz-a-viz International Labour Organization.
4. Identify issues pertaining to employee relations in an organization.

#### **Unit 1: Industrial Relation Management**

Concept - Evaluation – Background of industrial Relations in India- Influencing factors of IR in enterprise and the consequences. Economic, Social and Political environments: Employment Structure – Social Partnership – Wider approaches to industrial relation – Labour Market.

#### **Unit 2: Trade Union**

Introduction – Definition and objective – growth of Trade Union in India-trade Unions Act, 1926 and Legal framework-Union recognition-Union Problems-Employees Association-introduction, Objective Membership, Financial Status.

#### **Unit 3: Quality of Work Life**

Workers' Participation in Management – Worker's Participation in India, shop floor, Plant Level, Board Level – Workers' Welfare in India scenario- Collective bargaining concepts & Characteristics – Promoting peace.

#### **Unit 4: Industrial Disputes**

Meaning, nature and scope of industrial disputes – Cases and Consequences of Industrial Disputes – Prevention and Settlement of industrial disputes in India. The Industrial Disputes Act 1947, Employee Grievances: Causes of grievances – Conciliation, Arbitration and Adjudication procedural aspects for Settlement of Grievances – Standing Orders – Code Discipline.

### **Unit 5: Legal Framework of Industrial Relations**

Settlement Machinery for Industrial Disputes: Conciliation, Arbitration & Adjudication, Legislation: The Trade Unions Act 1926, The Industrial Dispute Act 1947, The Factory's Act 1948, The Contract Labor Act 1970, The Payment of Bonus Act, 1965, The Industrial Employment (Standing Orders) Act 1972, The Minimum Wages Act 1948, The Payment of Wages Act 1936, The Workmen's Compensation Act 1923, The ESI Act 1948, The Employees' Provident Fund and Miscellaneous Provisions Act 1952 and The Maternity Benefits Act 1961, Overview of these Acts Only.

#### **Text books:**

- Industrial Relations and Labour Laws Paperback by Piyali Ghosh, Shefali Nandan, McGraw Hill Education; 2015.
- Industrial Relations and Labour Laws Paperback, by S.C. Srivastava Vikas Publishing House; 2012.

#### **Reference Books:**

- Padhi, P.K. (2011), Labor and Industrial Laws. Prentice Hall of India.
- Srivastava S.C (2012), Industrial Relations and Labour Laws, 6/e, Vikas Publishing House

#### **Suggested Readings:**

- Sen, R. (2009). Industrial relations: text and cases (2nd ed.). New Delhi: Macmillan Publishers.
- VenkataRatnam, C. S. (2006). Industrial relations. New Delhi: Oxford University Press.

## **Organizational Development and Team Building**

### **Credits - 3**

#### **Course Objectives:**

1. To define, describe how to support and/or control change and initiate and respond to change
2. To explain, evaluate the main theories and practices of Organizational Development
3. To develop, design models of organizational development interventions
4. To identify, interpret, diagnose organizational needs for development and change, recommend and implement strategic interventions and techno structural solutions to organizational problems

#### **Course Outcomes:**

Upon successful completion of the course the student should be able to:

1. Able to comprehend the principles of OD located in human relations school of management.
2. Identify major types of organizational development interventions.
3. Demonstrate how to evaluate organizational development interventions.
4. Apply human resource intervention techniques in different management scenarios.
5. Describe human resources metrics and how they relate to organizational development

### **Unit 1: Organizational Development as a Profession and Field of Practice**

Nature and Characteristics of Organization Development, Organization Development as an evolving field of Practice. Managing the Organization Development Process, Organizational Change Theories and Models, Organizational Change process, Values, Ethics and assumptions of OD, Role and Competencies of the OD practitioner.

### **Unit 2: The Diagnostic Process and Introduction to OD Interventions**

Diagnosis: At the Organization, Group and Individual Level. Data Collection Process, Diagnostic Methods, Challenges in Diagnosis, Diagnostic Information Feedback: Survey Feedback. Designing Interventions, Characteristics of Effective Interventions, The Intervention Process.

### **Unit 3: Organizational Development Interventions**

Sensitivity Training, Process Consultation, Third-Party Interventions, Team Building, Organization Confrontation Meeting, Intergroup Relations Interventions, Large Group Interventions: Grid OD; System 4 Management; Role Playing, Employee Empowerment, Performance Management Systems, Employee Wellness Interventions, Career Planning, MBO.

### **Unit 4: Techno Structural and Strategic Interventions**

Restructuring Organizations, Job Enrichment, Socio-technical Systems, TQM and Quality Circles, Culture Change, Self –Designing Organizations, Learning Organizations, OD practitioners as Agents of Social Change, Future of OD in a VUCA World (Volatility, Uncertainty, Complexity, Ambiguity).

### **Text Books:**

- Cummings TG. & Worley C G (2014) Organisational development and Change. 10<sup>th</sup> edition. Cengage Learning.
- Brown, D.R. & Harvey, D. (2013). An Experiential Approach to Organization Development. Pearson Education.

### **Reference Books:**

- French, W., Cecil, H. Bell & Jr. (2004). Organizational Development. Prentice Hall of India Pvt. Ltd.
- Jones, B.B. & Brazzel, M (2014), The NTL Handbook of Organizational Development and Change: Principles, Practices and Perspectives (2<sup>nd</sup> Edition), Wiley.

### **Suggested Readings:**

- Burnes B. (1996). Managing Change: A Strategic Approach to Organizational Dynamics. London, Pitman.
- Boss, R.W., & McConkie, M.L. (2008). Team building. In T. G. Cummings (Ed.), Handbook of organization development (pp. 237-259). Thousand Oaks, CA: Sage.
- Jones, G. R. (2010). Organizational Theory Design and Change. Pearson Education.

# **Strategic Human Resource Management**

**Credits - 3**

## **Course Objectives:**

1. To explain the feasibility and nature of the link between business strategy and HR strategy
2. To align the key areas of Strategic Human Resource Management with strategy
3. To describe key aspects of strategic forecasting the human resources needs of an organization and strategic training and development
4. To appraise the strategic HRM and emerging issues.

## **Course Outcomes:**

Upon successful completion of the course the student should be able to:

1. Apply critical thinking skills in analysing theoretical and applied perspectives of strategic HRM.
2. Analyse problems and develop managerial solutions to employment relations problems at both
3. National and workplace level.
4. Demonstrate the application of problem solving and evaluation skills in HRM through exercises and case study work.
5. Communicate knowledge of SHRM in both written and verbal formats reactive to both audience and purpose.
6. Investigate and communicate the professional values of HRM including the ethical problems inherent in HRM professional roles, including managers and consultants.

## **Unit 1: Understanding Strategic HRM**

Traditional Vs strategic HR, Typology of HR activities, 'Best fit' approach Vs 'Best practice' approach, HR strategy and the role of national context, sectoral context and organizational context on HR strategy and practices, Investment perspective of human resources. HR Strategy Formulation HR Strategy in Multinational, Global and Transnational companies, Corporate Ethics, Values and SHRM

## **Unit 2: Aligning HR Systems with business strategy**

Sustained competitive advantage – how HR adds value to the firm HR as scarce resource inimitable resource non-substitutable resource, HRM leading strategy formulation, Alternative HR systems universalistic contingent configurational, Congruence and Integrated HR systems, Designing congruent HR systems.

## **Unit 3: HR Strategy in workforce utilization**

Efficient utilization of Human resource cross training and flexible work assignment work teams non-unionization, Strategies for employee shortages, Strategies for employee surpluses.

## **Unit 4: HR strategy for training and development**

Benefits, Strategic HR Planning Acquisition and Development planning and strategizing training, integrated learning with performance management system and compensation.

**Unit 5: High Performance Work Practices**

Individual high-performance practices, limitations of individual HPWP, Systems of HPWP skill system motivating system, Individual practices Vs systems of practices, Universal practices Vs contingency perspectives.

**Unit 6: Strategic HRM in emerging HR issues**

HR Strategy in workforce diversity virtual teams' flextime and telecommuting HR outsourcing contingent and temporary workers Global sourcing of labor, Expatriation and repatriation management in global HRM, Gender discrimination and Glass ceiling effect, Employee engagement strategies, Talent management and retention. Global Environment of HR: Change & Diversity.

**Text Books:**

- Catherine Truss, David Mankin, Clare Kelliher (2012). Strategic Human Resource Management. Oxford
- Tamer K. Darwish. (2013). Strategic HRM and Performance: Theory and Practice. Cambridge Scholars Publishing.

**Reference Books:**

- Rees, C. & Edwards, T. (2010), International Human Resource Management, 2/e, Pearson Education.
- Mello, J.A. (2011), Strategic Management of Human Resources, 3/e, Cengage Learning India Pvt. Ltd.
- Dowling, P.J. & Welch, D.E. (2010), International Human Resource Management: Managing People in a Multinational Context, Cengage Learning India Pvt. Ltd.

**Suggested Readings:**

- Greer, C. (2008), Strategic Human Resource Management, Pearson Education.
- Kandula S. R. (2009), Strategic Human Resource Development, Prentice Hall India.
- Evans, P., Pucik, V. & Barsoux, J.L. (2010), The Global Challenge: Frameworks for International Human Resource Management, Tata McGraw Hill, Delhi.

## **Cross Cultural and International Human Resource Management**

**Credits - 3**

**Course Objectives:**

1. To recognize, outline, and illustrate the enduring global contexts of International HRM
2. To understand how to develop, prepare staffing international operations for sustained global growth, recruiting and selecting staff for international assignments
3. To demonstrate; appraise the implications of IHRM in the Host Country Context

4. To evaluate, interpret issues of international training, development and compensation and interpret, analyze the International Industrial Relation issues and performance management.

### **Course Outcomes:**

Upon successful completion of the course the student will be able to:

1. Analyze different meanings and dimensions of “culture”.
2. Describe and analyze the impact of culture on business practices.
3. Explain and analyze the impact of national culture on organizational cultures.
4. Assess the impact of culture on Human Resource Management.
5. Explain how leadership differs across cultures.

### **Unit 1: Understanding Culture**

Introduction, Key Concepts, of Cultural Identity, Frameworks for Mapping the Culture, Geert Hofstede, Clyde Cluckhohn, TE Hall, Studies of National Culture

### **Unit 2: Internationalization of HR Activities**

Types of International Business, inter country differences affecting HRM, causes for international assignments failure. Limitations and advantages of host country nationals (HCN). Parent country nationals (PCN) & Third country national (TCN): International Staffing Policy, Selecting International Managers, Adaptability & Screening, Managing Knowledge Workers.

### **Unit 3: Understanding Cross Culture**

Organization culture & National culture, Cross – culture Theories, Cross – Culture Business Communication & Behavior, Culture & Organizational Performance.

### **Unit 4: Training & Maintaining International Compensation**

Training for Expatriate Managers, National Differences in Compensation, Factors Influencing International Compensation, Components of Remuneration Package. Expatriate Performance Management, Repatriation, International Labour relations, Problems and solutions.

### **Unit 5: International Human Resource Management**

Some innovative Japanese Management techniques, such as just in time theory, quality circles and Kaizen, Influence of Western HRM Practices on Employment of expatriates.

### **Text Books:**

- International Human Resource Management, by Peter J. Dowling, Cengage Learning India Private Limited, 2017.
- Anne-Wil Harzing, & Ashly Pinnington (2014). International HRM. SAGE.

### **Reference Books:**

- K. Aswathappa. (2007). International HRM. Tata McGraw Hill
- International Human Resource Management, by Anne-Wil Harzing, Ashly Pinnington, Sage Publications India Private Limited, 2017

### **Suggested Readings:**

- Gupta, S.C (2009). Text book of International HRM, Macmillan Publishing.

- Dowling, P. J., Festing, M., & Engle, Sr. A. D. (2008). International human resource management (5th ed.) London: Thompson Learning.
- Harzing & Ruysseveldt (2004). International Human resource Management. Sage Publications Ltd. London.

## **Training and Development**

**Credits - 3**

### **Course Objectives:**

1. To understand the needs of training and development for 21st century
2. To understand the organizational, societal and individual costs and benefits of training and development.
3. To understand the advanced training strategies and specifications for the delivery of training programs.
4. To understand the concepts of training need evaluation and its techniques

### **Course Outcomes:**

Upon successful completion of the course the student will be able to:

1. List training and development needs for the 21st century.
2. Explain the organizational, societal and individual costs and benefits of training and development.
3. Develop, analyze and apply advanced training strategies and specifications for the delivery of training programs.
4. Describe appropriate implementation, monitoring and assessment procedures of training.
5. Evaluate training programs using appropriate design and data collection procedures.

### **Unit 1: Introduction**

The Changing Organizations, HR and the Training Functions, Models of Training; Systematic Model, the Transitional Model, The Learning Organisation, Training as Consultancy.

### **Unit 2: Training Needs Analysis**

The Process and Approaches of TNA, Teamwork for Conducting Training Needs Analysis, TNA and Training Process Design.

### **Unit 3: Training Design & Evaluation**

Understanding & Developing the Objectives of Training, Facilitation of Training with Focus on Trainee (Motivation of Trainee, Reinforcement, Goal setting), Training with Focus on Training Design (Learning Environment, Pre-training Communication etc.) Facilitation of Transfer with Focus on Organization Intervention (Supervisor Support, Peer Support, Trainer Support, Reward Systems, Climate etc.

### **Unit 4: Effective Trainer**



Selecting the trainer and preparing a lesson plan, skills of an effective Trainer, Programme methods and techniques. Implementation and Evaluation of Training Programme. Levels of Evaluation, CIPP Model, CIRO model, Training Audit and Cost Analysis.

### **Unit 5: Management Development**

Approaches to Management Development, Sources of Knowledge / Skill acquisition, Types of management Development Programmes. EDP's / Seminars and Conferences, Symposia.

### **Unit 6: Emerging Trends in Training**

New learning interventions, Technology in training-CBT- multimedia training, e-learning/online learning- distance learning, Competency based Training, Assessment Centres.

#### **Text Book:**

- Blanchard, P. N., Thacker, W. J., & Anand Ram, V. (2015), Effective Training: Systems, Strategies and Practices, Pearson India Ltd.
- Lynton, R.P, Pareek U (2011), Training for Development, Sage Publication.

#### **Reference Books:**

- Balakrishnan Lalitha , Ramachandran (2015), Training and Development, 1/e,Vijay Nicole Imprints Pvt. Ltd.
- Robins P. S., (2015), Training Interpersonal Skills, 6/e, Pearson Education.

#### **Suggested Readings:**

- Raymond Noe, A. (2005). Employees Training and Development", McGraw Hill Publication.
- Kozlowski, S. W. J. & Slas, E. (Ed.). (2009). Learning, training, and development in organizations. New York: Routledge.
- Steve W.J. Kozlowski, Eduardo Salas (2009). Learning, Training, and Development in Organizations. Taylor & Francis.

## **Compensation Management**

**Credits - 3**

### **Course Objectives:**

1. To study the concepts of Minimum wage – Fair wage, Real wage, Issues and Constraints in Wage Determination in India.
2. To understand the ways to strengthen the pay for performance link.
3. To understand the strategies for employee benefits.
4. To understand the concepts of strategic compensation

### **Course Outcomes:**

Upon successful completion of the course the student should be able to:

1. Describe Minimum wage – Fair wage, Real wage, Issues and Constraints in Wage Determination in India.
2. Illustrate different ways to strengthen the pay for performance link.
3. Evaluate the concepts of employee benefits.
4. Exhibit the knowledge of legal framework required in employee benefits.
5. Demonstrate the implications of strategic compensation and possible employer implications.

### **Unit 1: Introduction**

Compensation: meaning, objectives, nature of compensation. Nature & Significance of wage, salary administration, essentials-Minimum wage – Fair wage, Real wage, Issues and Constraints in Wage Determination in India.

### **Unit 2: Compensation system design issues**

Compensation Philosophies, compensation approaches, decision about compensation, compensation- base to pay, individual Vs team rewards, Perceptions of pay Fairness, legal constraints on pay systems.

### **Unit 3: Managing Compensation**

Strategic Compensation planning, determining compensation-the wage mix, Development of a Base Pay System: Job evaluation systems, the compensation structure- Wage and salary surveys, the wage curve, pay grades and rate ranges, preparing salary matrix, government regulation on compensation, fixing pay, significant compensation issues, Compensation as a retention strategy.

### **Unit 4: Variable Pay and Executive Compensation**

Strategic reasons for Incentive plans, administering incentive plans, Individual incentive plans- Piecework, Standard hour plan, Bonuses, Merit Pay, Group incentive plans- Team compensation, Gain sharing incentive Plans, Enterprise incentive plans- Profit Sharing plans, Stock Options, ESOPs, EVA. Executive compensation, elements of executive compensation and its management, international compensation Management.

### **Unit 5: Managing Employee Benefits**

Benefits- meaning, strategic perspectives on benefits-goals for benefits, benefits need analysis, funding benefits, benchmarking benefit schemes, nature and types of benefits, Employee benefits programs- security benefits, retirement security benefits, health care benefits, time-off benefits, benefits administration, employee benefits required by law, discretionary major employee benefits, creating a work life setting, employee services- designing a benefits package.

#### **Text Books:**

- Martocchio, J. (2014), Strategic Compensation: A Human Resource Perspective Approach. Pearson Education.
- Henderson, R.I. (2009), Compensation Management in a Knowledge-based world 10/e. Pearson Education.

#### **Reference Books:**

- Singh, B.D. (2007), Compensation and Reward Management. Excel Books.

- Gerhart, B. & Rynes, S.L. (2008), Compensation, Evidence, and Strategic Implications. Sage Publication.

**Suggested Readings:**

- Milkovich, G & Newman, J.M. (2006). Compensations. New Delhi: McGraw Hill Publishing Company.
- Berger & Berger. (2008), The Compensation Handbook: A State-of –the –Art Guide to Compensation Strategy and Design. McGraw Hill.

## **Performance Management**

**Credits - 3**

**Course Objectives:**

1. To study the concepts and issues related to performance management.
2. To understand the practices followed for performance management.
3. To understand the systems of performance assessment and coaching.
4. To understand the issues in manpower training and career development.

**Course Outcomes:**

Upon successful completion of the course the student will be able to:

1. Identify issues relating to performance management.
2. Describe the terminologies and practices regarding performance management.
3. Design effective performance appraisal systems and ways to coach members of management.
4. Assess globalization, technology and Human resource issues.

**Unit 1: Manpower Management**

HR Management in the 21st Century; Environmental Context of Human Resource Management; The Emerging Profile of Human Resources; Special Features of New Technology; Concept and Process of Technological Innovation; Organizational and Human Resource Implications of Technological Change.

**Unit 2: Globalization, Technology and Human Resource Issues**

Technology and Culture, Technology Management, Changing Technology and New Leadership Skills, Economic Theory of Choice and Employee Benefits.

**Unit 3: Performance Management**

Concepts and issues, definition, performance, principles, role of performance management in organization. Framework and key factors to successful performance system.

**Unit 4: Evaluating HR function**

Overview of evaluation scope strategic impact level of analysis Criteria Level of Constituents ethical dimensions, Approaches to evaluation audit approach analytical approach quantitative and qualitative measures outcome and process criteria, Balanced Scorecard perspective, Benchmarking, Accounting for HRM.

**Unit 5: HR Scorecard**

Creating an HR Scorecard, Measuring HR alignment 2 dimensions of alignment assessing internal and external alignment Systems alignment Map. 7 step Model for implementing HR's strategic role. New issues in Manpower Training and Career Development.

**Text books:**

- Robert Bacal. (2012). Performance Management 2<sup>nd</sup> edition. McGrawHill.
- Kohli, A.S. & Deb, T. (2013), Performance Management. Oxford University Press, New Delhi.

**Reference Books:**

- Aguinis, H. (2013), Performance Management, 3/e, Pearson Education.
- Michael, Armstrong (1999). Performance Management. Kogan Page.

**Suggested Reading:**

- Aguinis, H. (2008). Performance management (2nd ed.). USA: John Wiley.
- Zeytinoglu, I. U. (2009). Effects flexibility in the workplace on workers: Work environment and the unions. Geneva: International Labour Office.
- Performance Management by Linda Ashdown, Kogan Page

## **Changing Paradigms in Leadership**

**Credits - 3**

**Course Objectives:**

1. To understand the essence of group dynamics and team work.
2. To study the aspects related to effective working styles and leadership.
3. To understand the nuances of innovative leadership.
4. To study the concepts of game changing innovation.

**Course Outcomes:**

Upon successful completion of the course the student should be able to:

1. Demonstrate a commitment to social justice.
2. Describe group dynamics and effective teamwork.
3. Exhibit the ability to work effectively with those different from themselves.
4. Generate ideas with the insight of innovative leadership.
5. Exhibit the ability for game changing innovation.

**Unit 1: The Evolution of Leadership Paradigms:** To explore the traditional and contemporary paradigms of leadership. Traditional leadership models (trait theory, behavioural theory, and contingency theory). Emergence of transformational and transactional leadership styles. Leadership in the age of disruption: the impact of AI, globalization, and social movements. The shift from authoritative leadership to collaborative and servant leadership.

**Unit 2: Adaptive Leadership and Leading in Complex Environments:** The concept of adaptive leadership: dealing with uncertainty, change, and complexity. The role of leaders in organizational transformation. Building resilience and agility in leadership. Leading through crises: lessons from COVID-19.

**Unit 3: Emotional Intelligence and Leadership Development:** The five components of emotional intelligence (self-awareness, self-regulation, motivation, empathy, and social skills). The role of empathy and emotional intelligence in leading diverse teams. Managing conflict and fostering collaboration through emotional intelligence. The science behind EQ: how emotions influence decision-making and organizational outcomes. Practical Exercise: EQ self-assessment and development plan. Case Study: Howard Schultz and his emotionally intelligent leadership at Starbucks.

**Unit 4: Ethical Leadership, Diversity, and Inclusive Decision-Making** To explore the importance of ethics, diversity, and inclusion in modern leadership. The rise of ethical leadership: corporate social responsibility and the leader's role. Creating inclusive leadership: the impact of diversity in driving innovation and business growth. Leading with values: balancing profits and purpose. Ethical decision-making frameworks in leadership. Sustainability and the role of leaders in driving long-term positive societal impact.

**Text Books:**

- Zaleznick . A. (2006). Learning Leadership: The Abuse of Power in Organizations. London: Sage.
- Cialdini, R. B. (2008). Influence: Science and practice. New York: Allyn and Bacon.

**Reference Books:**

- Bocanova, M. (2006). Intercultural communication: typical features of the Czech, British, American, Japanese, Chinese and Arab cultures. Praha: Oeconomica.
- Brett, J. M. (2001) Negotiating globally: How to negotiate deals, resolve disputes, and make decisions across cultural boundaries. San Francisco: Jossey Bass.

**Suggested Readings:**

- Clegg, S.R., Courpasson, D., & Phillips, N. (2006). Power and Organizations. London: Sage.
- Leadership transition by Richard Elsuer, Kogan Page.

## **Interpersonal Processes and Counseling Skills for Managers**

**Credits- 3**

**Course Objectives:**

1. To understand the key issues in attending skills.
2. To study the aspects related to empathic listening and responding skills.
3. To study the techniques of probing and summarizing.
4. To study the applications of counseling skills

**Course Outcomes:**

Upon successful completion of the course the student will be able to:

1. Identify how to clarify key issues in attending skills.
2. Demonstrate empathic listening and responding skills.
3. Apply the techniques of probing and summarizing.

4. Demonstrate the skill of challenging client assumptions.
5. Exhibit counseling skills and its applications.

### **Unit 1: Managerial Process**

Nature of Management, functions of managers, leadership and managerial effectiveness, Managerial conflict.

### **Unit 2: Interpersonal & Group Process**

Interpersonal communication, Interpersonal feedback, Interpersonal behavior and influence relationships, Interpersonal style. Group Process: An overview of group formation, Group development and effectiveness, formal and informal groups, reasons for formation of groups, theories of group, group behavior.

### **Unit 3: Introduction to Counselling**

Definition & Need, Counselling, Psychotherapy and Instruction, Approaches to Counselling, Goals of Counselling, Counseling Process.

### **Unit 4: Counselling Procedures**

The Counselling Environment, Intake, Referral procedures, Guidelines for effective counseling, Advanced skills in Counselling, Action strategies. Counselling Skills, Verbal & Non- Verbal communication, Listening Barriers, Counsellor' Qualities, Core conditions of Counselling. Role of Conflict in Counselling: Values of counselling, Counselling service, Manager counselor.

### **Unit 5: Organisational Application of Counselling Skills.**

Change management, Downsizing, Mentoring, Team Management / Conflict Resolution, Crisis / Trauma. Problem Subordinates: Identifying problem subordinates, Types of problem subordinates, dealing with problem subordinates.

### **Unit 6: Ethics in Counseling**

Ethical Principles, Common Ethical Violations.

### **Text Books:**

- Karen Stainsby (2007). Develop your interpersonal and self –management skills. Radcliffe publishing.
- Singh, Kavita (2015). Counselling Skills for Managers, PHI.

### **Reference Books:**

- Counselling Skills for Managers (Counselling Skills in Action) by Ms. Susan, Dr Tim Bond, Sage Publications Ltd., 2010.
- Counselling Skills for Managers by Alok Satsangi, Lakshi Publishers, 2014.

### **Suggested Readings:**

- Singh, K. (2009). Counselling skills for managers. New Delhi: Prentice Hall of India.
- Mei-Whei Chen & Christopher J. Rybak. (2003). Group Leadership Skills: Interpersonal Process in Group Counseling and Therapy.

## **HR Analytics**

**Credits - 3**

**Course Objectives:**

1. To study the principles of HR Analytics and its role in present day organizations.
2. To understand the concept of Equality, diversity and inclusion in HR.
3. To understand the Reliability and validity of selection models.
4. To understand the concepts of Performance analysis.

**Course Outcomes:**

Upon successful completion of the course the student should be able to:

1. Examine/understand the nuances of HR Analytics and its importance.
2. Examine and understand the concept of Equality, diversity and inclusion in HR.
3. Evaluate the reliability and validity concerns of the selection models.
4. Assess the Performance Analysis for optimizing the performance of employees.

**Unit 1: Introduction to HR Analytics:** Evolution of HR Analytics, HR information systems and data sources, HR Metric and HR Analytics, Evolution of HR Analytics; HR Metrics and HR Analytics; Intuition versus analytical thinking; HRMS/HRIS and data sources; Analytics frameworks like LAMP, HCM:21(r) Model.

**Unit 2: Diversity Analysis:** Equality, diversity and inclusion, measuring diversity and inclusion, Testing the impact of diversity, Workforce segmentation and search for critical job roles

**Unit 3: Recruitment and Selection Analytics:** Evaluating Reliability and validity of selection models, finding out selection bias, Predicting the performance and turnover.

**Unit 4: Performance Analysis:** Predicting employee performance, training requirements, evaluating training and development, Optimizing selection and promotion decisions

**Unit 5: Monitoring impact of Interventions:** Tracking impact interventions, Evaluating stress levels and value-change. Formulating evidence-based practices and responsible investment. Evaluation mediation process, moderation and interaction analysis

**Text Books:**

- Fitz-Enz Jac, (2001), How to Measure Human Resource Management, McGraw Hill
- Mello Jeffrey A., (2008), Strategic Human Resource Management, Thompson Press.
- Rao T.V. (1999), HRD Audit, Response Books.

## **Negotiation Skills and Conflict Management**

**Credits – 3**

**Course Objectives:**

1. To study the functions and principles of negotiation skills and learn the dynamics of the conflict management processes in an organization.
2. To study the system and process of effective management of negotiation in the organization.
3. To understand negotiation style and tactics of negotiation and how to be an effective negotiator.
4. To learn ethics and negotiation and trust in the work environment.

**Course Outcomes:**

Upon successful completion of the course the student should be able to:

1. Examine/understand what conflict management is and why it is important.
2. Examine and understand the styles on how managers should negotiate.
3. Evaluate ethical issues as related to negotiation styles and conflict management.
4. Assess the impact of negotiation and conflict management on organizational effectiveness.

**Unit 1: Managing Conflict**

Concept and Importance of conflict, Organisation as network of relations and conflicts, nature of conflict, sources of conflict, processes and dynamics of conflict, classification of conflict, strategy and management of conflict.

**Unit 2: Managing negotiation**

Managing and planning for negotiation, negotiation process, The third-party intervention – Litigation/Conciliation/arbitration, Role of power in negotiation, role of communication and role of influencing style in negotiation, Principles of persuasion. Gaining leverage through power and persuasion: leveraging power from your BATNA (Best Alternative to a Negotiated Agreement), leveraging the sources of power, leveraging power through persuasion, leverage power through pressure tactics.

**Unit 3: Negotiation Style**

Four major Negotiation Styles (Avoidance, Competitive, Compromising and Collaborative), choosing the appropriate style, Alternative styles, strategies and techniques of negotiation. Distributive Bargaining: Classical distributive bargaining, Opening offers, Role of norms, Counteroffers. Integrative Bargaining: Integrative versus Distributive Bargaining, The Categorization Method, Interest based Bargaining.

**Unit 4: Tactics for Negotiation**

Cross cultural Dimension of Negotiation, Glimpses into Some Aspects of International negotiation, negotiating with Prospective employers, some suggested practices to be followed in negotiation. Closing the Deal and Post Negotiation Evaluation, agreement template, closing stage, moving past statement and building a relationship.

**Unit 5: Ethics and Negotiation**

Ethics, fairness, and trust in negotiation, Ethics - values and behaviours in negotiations, Fairness - substantive and procedural fairness in negotiation, appropriate or inappropriate negotiating tactics, Trust – bases and relationship in negotiating trust, trust and distrust, establishing trust.

**Text Books:**

- Singh, K. (2015). Counseling Skills for Managers (2nd ed.). India: Prentice Hall of India.
- Brett, J. M. (2014). Negotiating Globally: How to Negotiate Deals, Resolve Disputes, and Make Decisions Across Cultural Boundaries (3rd ed.). Jossey-Bass.
- Carrell, M. R., and Heavrin, C. (2008) Negotiating Essentials: Theory, Skills, and Practices. Pearson Prentice Hall.
- Kottler, J.A., & Shepard, D. S. (2008). Counseling Theories and Practices (1st ed.). Cengage Learning.



- Patterson, L. E., & Welfel, E. R. (2004). The Counseling Process: A Multitheoretical integrative Approach (Skills, Techniques, & Process, Cengage Learning (6th ed.).

#### **Suggested Readings:**

- Rogers, C. C. (1961). On Becoming a Person: A Therapist View of Psychotherapy. Boston: Houghton-Mifflin.
- Cialdini, R. B. (2008). Influence: Science and practice. New York: Allyn and Bacon
- Lewicki, R., Barry, B. & Saunders, D. (2015). Essentials of Negotiation (6th ed.). McGraw Hill.
- Thompson, L. L. (2012). The Mind and Heart of the Negotiator (5th ed.). Pearson.
- Young, M. (2008). Sharks, saints and samurai: The power of ethics in negotiations. Negotiation Journal, 24 (2), 145-155.

## **Business Excellence through Human Resource Management (HRM)**

**Credits: 3**

#### **Course Objectives:**

1. To provide an in-depth understanding of the role of HRM in achieving business excellence and competitive advantage.
2. To explore HR strategies, leadership models, and best practices that drive organizational performance and employee engagement.
3. To analyze key HR functions such as talent management, performance appraisal, and workforce development in the context of business excellence.
4. To equip students with knowledge of HR analytics, digital transformation, and global HR trends for sustainable business growth.

#### **Course Outcomes:**

On successful completion of the course, students will be able to:

1. Understand the strategic role of HRM in fostering business excellence and organizational growth.
2. Evaluate HR models, frameworks, and best practices for enhancing employee performance and productivity.
3. Analyze the impact of leadership, culture, and talent management on achieving business goals.
4. Apply modern HR tools and techniques, including HR analytics and digital HR solutions, to drive business success.

#### **Unit 1: Fundamentals of Business Excellence and HRM**

Concept of Business Excellence: Definition, Importance, and Frameworks (EFQM, Malcolm Baldrige, Deming Model), HRM as a Strategic Business Partner: Aligning HR with Business Goals, Talent Management for Business Success: Workforce Planning, Talent Acquisition, and Retention Strategies, Performance Management Systems: Goal Setting, KPI Measurement, and Balanced Scorecard Approach

#### **Unit 2: Leadership, Culture, and Employee Engagement**

Leadership Development for Business Excellence: Transformational vs. Transactional Leadership, Organizational Culture and Business Performance: Creating a High-Performance Culture, Employee Engagement and Motivation Strategies: Psychological Contract, Workplace Well-Being, and Rewards Systems, Diversity and Inclusion in Business Excellence: Building Inclusive Workplaces for Innovation and Growth

### **Unit 3: Technology and Digital Transformation**

Introduction to HR Analytics, Role of AI and Automation in HR: Chatbots, AI-Powered Recruitment, and Performance Tracking, HR Tech Innovations: Learning Management Systems (LMS), Cloud-Based HR, and Remote Workforce Management, People Analytics for Business Excellence: Using Data for Decision-Making and Performance Optimization, Challenges and Ethical Considerations in HR Digital Transformation

### **Unit 4: Global HR Trends and Future of Work**

Future of Work and Workforce Trends: Gig Economy, Hybrid Work Models, and Remote Work Culture, Sustainable HRM and Corporate Social Responsibility: Green HRM, Ethical HR Practices, and Employee Well-Being Initiatives, HR's Role in Crisis Management and Resilience Building, Global HRM Challenges: Cross-Cultural Management, Global Talent Mobility, and Expatriate Management

#### **Text Books:**

- Dave Ulrich, HR from the Outside In: Six Competencies for the Future of Human Resources (McGraw Hill)
- Jeffrey Pfeffer, The Human Equation: Building Profits by Putting People First (Harvard Business Review Press)

#### **Reference Books:**

- Gary Dessler, Human Resource Management (Pearson)
- Peter Cappelli, Talent on Demand: Managing Talent in an Age of Uncertainty (Harvard Business Review Press)
- R. Wayne Mondy & Joseph J. Martocchio, Human Resource Management (Pearson)
- Edward E. Lawler III & Christopher G. Worley, Built to Change: How to Achieve Sustained Organizational Effectiveness (Wiley)

## **HRM in Service Sector**

### **Credits - 3**

#### **Course Objectives:**

1. To understand the concept and growing importance of HRM in service sector.
2. To understand how to manage human resources in service sector.
3. To understand the significance of human element in creating customer satisfaction through service quality.
4. To understand the issues and challenges of HR in various service sectors.

#### **Course Outcomes:**

Upon successful completion of the course the student should be able to:

1. Examine/understand concept and growing importance of HRM in service sector.

2. Understand the nuances and aspects of managing HR in service sector.
3. Assess the essence of human element in creating customer satisfaction.
4. Understand the issues and challenges of HR in various service sectors.

### **Unit 1 Service Sector Management – An Overview:**

Services – Meaning, Features, Classification of Services: End-user, Degree of Tangibility, People-based Services, Expertise Required, Orientation towards Profit, By Location; Service Sector Management – Meaning, Significance of Service Sector, Reasons for Growth in Service Sector; Service Organization – Importance of Layout and Design of Service Organization, Servicescape; Service Culture in Organization – Meaning, Developing Service Culture in Organization; Relationship Marketing –Meaning, Need and Importance in Service Sector Organizations, Six Market Model; Role of Service Employee; Role of Customers in Service Process – Customers as Productive Resources, Customers as Contributors to Service Quality, Customers as Competitors; Service Encounter and Moment of Truth – Meaning, Nature, Elements of Service Encounter.

### **Unit 2 Managing Human Element in Service Sector**

Human Element in Service Sector – Introduction, Role and Significance; The Services Triangle; Front Line Employees /Boundary Spanners – Meaning, Issues Faced by Front Line Employees: Person/Role Conflicts, Organization/Client Conflict, Inter-client Conflict; Emotional Labour – Meaning, Strategies for Managing; Emotional Labour - Recruitment in Service Sector – Recruiting Right People, Recruitment Procedures and Criteria, Challenges in Recruitment in Service Sector; Selection of Employees in Service Sector – Interviewing Techniques: Abstract Questioning, Situational Vignette, Role Playing; Develop People to Deliver Service Quality; Compensating Employees in Service Sector; Motivating Employees for Services; Quality Issues in Services: Meaning and Dimensions of Service Quality, The Service-Gap Model, Reasons and Strategies to Fill the Gaps; Delivering Services through Agents and Brokers –Meaning, Advantages, Challenges, Strategies for Effective Service Delivery through Agents and Brokers; HRM in Public Sector Organisations and Non-profit Sector in India

### **Unit 3. Issues and Challenges of HR in Specific Services:**

Business and Professional Services: Banking and Insurance, Legal and Accountancy; Infrastructure: Roads, Railways and Power; Public Services: Police, Defense and Disaster Management; Trade Services: Wholesale and Retail, Advertising, Maintenance and Repairs; Personnel Services: Education, Health Care and Hotels; Social and Charitable Services.

### **Unit 4 HRP Evaluation, Attrition, Retention and Globalisation**

HRP Evaluation, Attrition, Retention and Globalisation: Human Resource Planning Evaluation in Service Sector – Meaning, HRP Evaluation Process, Purpose of HRP Evaluation in Service Sector, Issues Influencing HRP Evaluation in Service Sector Service Leadership – Meaning, Integrating Marketing ; Operation and Human Resources, Creating a Leading Service Organisation, The Service-Profit Chain Model; Attrition in Service Sector – Meaning, Reasons for Attrition in Service Sector, Cycle of Failure, Cycle of Mediocrity and Cycle of Success; Retaining the Best People in Service Sector –Including Employees in Company's Vision, Treat; Employees as Customers, Measure and Reward String; Service Performers; Globalisation of Services – Meaning, Reasons for Globalisation of Services, Impact of Globalisation on Indian Service Sector, Organisational Effectiveness, Ways to Enhance Organisational Effectiveness.

**Text Books:**

- Korczynski, M. (2002), Human Resource Management in Service Work, Red Globe Press, 2002
- Sahu A. and Tiwari A.K. (2015), Human Resource Management (HRM) in Service Sector, Ruby Press & Co; 1st edition (1 January 2015)
- Bhattacharya R. and Mishra R.S. (2019), HRM in service sector Management, Himalaya Publishing Co.

## **Talent Management**

**Credits - 3**

**Course Objectives:**

1. To study the principles of talent management and learn the role of talent management in achieving competitive advantage in an organization.
2. To study the best HRM system and process for effective talent management in an organization.
3. To understand talent management in global context.
4. To learn talent analytics and talent development in the work environment.

**Course Outcomes:**

Upon successful completion of the course the student should be able to:

1. Examine/understand what talent management is and its importance.
2. Examine and understand the HRM systems on how managers should manage talent.
3. Evaluate the global talent management practices.
4. Assess the impact of talent management on organizational effectiveness.

**Unit 1: Define Talent and Talent Management**

Historical context of talent management: Challenges and Dilemmas; single-ladder pipeline versus multiple pipelines; aligning strategy and talent management for competitive advantage.

**Unit 2: Best HRM Practices for managing talent/star employees**

(Hiring, rewarding, retaining, performance management and succession planning etc.); employer branding and talent management; Role of social media in talent management.

**Unit 3: Talent management in different organizational contexts** Global context, disruptive organizations, complex and uncertain scenarios etc.

**Unit 4: Diversity and Talent**

Talent management and future directions, talent Analytics; preparing a talent development plan.

**Text Books:**

- Collings, D.G., Mellahi, K. & Cascio, W.F. (2017). The Oxford Handbook of Talent Management: Oxford University Press.
- Wilcox, M. (2016). Effective Talent Management: Aligning Strategy, People and Performance. Routledge.

**Suggested Readings:**

- Sparrow, P., Scullion, H. & Tarique, I. (eds) (2014) Strategic Talent Management: Contemporary Issues in Global Context. Cambridge: Cambridge University Press.
- Sparrow, P., Hird, M., and Cooper, C.L. (2015). Do We Need HR? Repositioning People Management for Success. Palgrave Macmillan

## **Contemporary Issues in Human Resource Management**

**Credits: 3**

### **Course Objectives:**

1. To explore emerging trends, challenges, and best practices in Human Resource Management (HRM) in the modern business environment.
2. To analyze the impact of globalization, technology, workforce diversity, and evolving labor laws on HR functions.
3. To examine strategic HRM practices for talent acquisition, employee engagement, and performance management in dynamic workplaces.
4. To equip students with insights into HR analytics, ethical considerations, and future workforce trends.

### **Course Outcomes:**

On successful completion of the course, students will be able to:

1. Identify and assess contemporary HR challenges and their implications for business success.
2. Analyze the role of HR in managing workforce diversity, digital transformation, and changing labor laws.
3. Develop strategies for employee engagement, talent retention, and performance management in a rapidly evolving business landscape.
4. Apply HR analytics and emerging technologies to improve HR decision-making and strategic planning.

### **Unit 1: Emerging Trends and Challenges in HRM**

Evolution of HRM: From Traditional to Strategic HRM, Changing Workforce Dynamics: Gig Economy, Remote Work, and Hybrid Work Models, HR's Role in Organizational Agility and Change Management, Workforce Diversity and Inclusion: Gender Diversity, Multigenerational Workforce, and Inclusive Policies, Impact of Globalization on HRM: Cross-Cultural HR Challenges and Global Talent Mobility.

### **Unit 2: Technology and Digital Transformation in HRM**

HR Technology Trends: AI in Recruitment, Chatbots, and Automation in HR Functions, HR Analytics and Data-Driven Decision-Making, Learning and Development (L&D) in the Digital Age: E-Learning, Gamification, and Virtual Training, Performance Management in a Tech-Driven Workplace: Real-Time Feedback, Digital Performance Tracking, Challenges of Implementing HR Tech Solutions and Cybersecurity Concerns.

### **Unit 3: Employee Well-Being, Ethics, and Legal Considerations**

Employee Well-Being and Mental Health Programs: Workplace Stress, Burnout, and Work-Life Balance, Ethical HR Practices: Fair Compensation, Ethical AI Use, and Preventing Workplace Discrimination, Evolving Labor Laws and Compliance: Impact of Labor Codes, Remote Work Policies, and Gig Worker Rights, HR's Role in Corporate Social Responsibility (CSR) and Sustainable HRM.

#### **Unit 4: Future of Work and HRM Innovations**

The Future Workforce: Upskilling, Reskilling, and Talent Development in the Age of Automation, Employer Branding and Talent Retention Strategies, Flexible Work Arrangements and Employee Experience Management, HRM in Crisis Management: HR's Role in Business Continuity Planning and Employee Support During Disruptions.

#### **Text Books:**

- Dave Ulrich, HR Transformation: Building Human Resources from the Outside In (McGraw Hill)
- K. Aswathappa, Human Resource Management: Text and Cases (McGraw Hill)

#### **Reference Books:**

- Peter Cappelli, The Future of the Employment Relationship (Harvard Business Review Press)
- John P. Wilson, The Future of Work and HRM (Routledge)
- Richard T. Wilkinson, Workplace Well-Being: Ethical and Legal Considerations (Oxford University Press)
- William H. Macey, Employee Engagement: Tools for Analysis, Practice, and Competitive Advantage (Wiley)

## **Area- Marketing**

### **Consumer Behavior**

**Credit – 3**

#### **Course Objectives:**

1. To understand the foundational theories and concepts of consumer behavior.
2. To analyze the psychological, social, and cultural factors influencing consumer decisions.
3. To apply consumer behavior insights to develop effective marketing strategies.
4. To evaluate the impact of digital advancements on consumer behavior.

#### **Course Outcomes:**

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

1. Explain key consumer behavior theories and their applications in marketing.
2. Assess the influence of internal and external factors on consumer decision-making.
3. Develop marketing strategies informed by consumer behavior analysis.

4. Critically evaluate the role of technology and digital media in shaping consumer behavior.

### **Unit1: Foundations of Consumer Behavior**

Definition and scope of consumer behavior, historical evolution and its significance in marketing, consumer research methodologies, market segmentation and targeting strategies.

### **Unit 2: Psychological Influences on Consumer Decisions**

Perception and its marketing implications, learning theories and their application in consumer behavior, motivation and its impact on purchasing decisions, attitude formation, change, and persuasion techniques.

### **Unit 3: Social and Cultural Determinants of Consumer Behavior**

Influence of reference groups and opinion leaders, family dynamics and lifecycle stages affecting consumption, social class stratification and consumer preferences, cultural, subcultural, and cross-cultural consumer behavior.

### **Unit 4: Contemporary Issues in Consumer Behavior**

Impact of digital media and technology on consumer habits, ethical considerations and sustainable consumption, consumerism and its effects on society, future trends in consumer behavior research.

### **Suggested Readings:**

- Schiffman, L.G., & Wisenblit, J. (2019). *Consumer Behavior*, 12th Edition, Pearson.
- Solomon, M.R. (2020). *Consumer Behavior: Buying, Having, and Being*, 13th Edition, Pearson.
- Hoyer, W.D., MacInnis, D.J., & Pieters, R. (2018). *Consumer Behavior*, 7th Edition, Cengage Learning.

## **Integrated Marketing Communication**

**Credits- 3**

### **Course Objectives:**

1. To provide a comprehensive understanding of Integrated Marketing Communications (IMC) and its role in modern marketing.
2. To introduce various IMC tools and their strategic applications in marketing campaigns.
3. To equip students with the ability to design and implement an effective marketing communication mix using traditional and digital tools.
4. To analyze and evaluate the effectiveness of IMC strategies across different industries and market segments.

### **Course Outcomes:**

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

1. Explain the concept, scope, and significance of IMC in marketing decision-making.

2. Identify and apply different IMC tools such as advertising, sales promotion, public relations, direct marketing, digital marketing, and personal selling.
3. Develop an integrated marketing communications plan that effectively combines multiple tools for a cohesive strategy.
4. Assess and measure the impact of IMC campaigns using appropriate metrics and evaluation techniques.

### **Unit 1: Introduction to IMC and Key Communication Tools**

Definition and importance of IMC, evolution of marketing communications, role of IMC in building brand messaging, overview of IMC tools – advertising, sales promotion, public relations, direct marketing, digital marketing, personal selling, influencer and experiential marketing, importance of a unified communication strategy.

### **Unit 2: Advertising, Public Relations, and Media Strategy**

Basics of advertising – objectives, types, and formats, media planning and selection (TV, print, radio, digital, outdoor), creative message development, public relations and corporate communication, PR tools (press releases, media relations, crisis communication), ethical and legal aspects of advertising and PR.

### **Unit 3: Sales Promotion, Direct Marketing, and Personal Selling**

Consumer and trade promotions (discounts, loyalty programs, contests, trade incentives), role of direct marketing (email, SMS, telemarketing, catalogs), database marketing and customer engagement, personal selling in IMC, selling techniques and negotiation skills, managing the salesforce.

### **Unit 4: Digital Marketing, Experiential Marketing, and IMC Campaigns**

Role of digital marketing in IMC, key digital tools (SEO, social media, content marketing, paid ads), integration of digital and traditional media, experiential and event marketing, sponsorship marketing, measuring IMC effectiveness, trends and innovations in IMC strategies.

### **Suggested Readings:**

- Belch, G. E., & Belch, M. A. (2021). *Advertising and Promotion: An Integrated Marketing Communications Perspective*, 12th Edition, McGraw-Hill.
- Shah, K. (2014). *Advertising and Integrated Marketing Communications*, Tata McGraw-Hill Education.
- Juska, J. M. (2021). *Integrated Marketing Communication: Advertising and Promotion in a Digital World*, Routledge.
- Shimp, T. A., & Andrews, J. C. (2018). *Advertising, Promotion, and Other Aspects of Integrated Marketing Communications*, 10th Edition, Cengage Learning.
- Percy, L. (2018). *Strategic Integrated Marketing Communications*, 2nd Edition, Routledge.

## **Business-to-Business Marketing**

**Credits- 3**

**Course Objectives:**



1. To introduce the fundamentals of B2B marketing and its role in business environments.
2. To explore the key differences between B2B and consumer markets, including buying behavior and decision-making.
3. To develop an understanding of the marketing mix and strategic approaches in B2B markets.
4. To help students analyze and apply marketing strategies for different business market segments.

### **Course Outcomes:**

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

1. Understand the core concepts and dynamics of B2B marketing.
2. Identify the key differences between B2B and B2C marketing in terms of buying processes, relationships, and strategies.
3. Apply segmentation, targeting, and positioning strategies in business markets.
4. Develop B2B marketing mix strategies, including product development, pricing, distribution, and communication.

### **Unit 1: Introduction to B2B Marketing**

Definition and scope of B2B marketing, differences between B2B and B2C markets, business market structure and demand, types of B2B customers, organizational buying behavior, buying decision process, relationship marketing in B2B.

### **Unit 2: B2B Market Segmentation and Customer Value**

Segmentation, targeting, and positioning in business markets, key factors in segmenting B2B markets, value creation and delivery for business customers, customer relationship management (CRM) in B2B marketing, B2B branding and reputation management.

### **Unit 3: B2B Product and Pricing Strategies**

B2B product strategy and product lifecycle, new product development in business markets, diffusion of innovation in B2B, managing services in B2B, role of pre-sales and post-sales services, pricing strategies in B2B markets, cost-based vs. value-based pricing, managing customer perceptions of pricing.

### **Unit 4: B2B Marketing Communication and Distribution Channels**

Role of digital marketing, trade shows, exhibitions, and business networking events, sales promotion techniques in B2B, personal selling and managing the sales force, negotiation and key account management, business marketing channels and logistics, channel design and management, ethical considerations in B2B marketing.

### **Suggested Readings:**

- Sarin, S. (2013). *Business Marketing: Concepts and Cases*, Tata McGraw-Hill Education.
- Zimmerman, A., & Blythe, J. (2017). *Business to Business Marketing Management: A Global Perspective*, Routledge.
- Havaladar, K. K. (2010). *Business Marketing: Text and Cases*, McGraw-Hill Education.
- Hutt, M. D., & Speh, T. W. (2021). *Business Marketing Management: B2B*, Cengage Learning.

# **Sales Management**

**Credits – 3**

## **Course Objectives:**

1. To introduce students to the fundamentals of sales management and its role in business success.
2. To develop an understanding of the sales planning process and effective sales strategies.
3. To explore key aspects of salesforce management, including recruitment, training, and motivation.
4. To analyze emerging trends in sales, including digital selling and sales analytics.

## **Course Outcomes:**

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

1. Understand the principles and functions of sales management.
2. Develop and implement sales strategies for different industries and markets.
3. Manage and lead a sales team effectively, including performance evaluation.
4. Utilize technology and analytics in sales decision-making.

## **Unit 1: Introduction to Sales Management**

Definition, scope, and role of sales management, difference between sales and marketing, evolution of sales management, types of selling, selling skills and approaches, ethical and legal aspects of selling.

## **Unit 2: Sales Planning and Strategy**

Sales forecasting methods, setting sales objectives, sales budgeting, designing sales territories, sales quota setting, sales force structuring, customer relationship management (CRM) in sales.

## **Unit 3: Sales Force Management**

Recruitment and selection of sales personnel, sales training and development, motivation techniques, compensation and incentives, sales performance evaluation, leadership in sales management.

## **Unit 4: Emerging Trends in Sales Management**

Technology in sales (AI, automation, CRM software), key account management, digital and social selling, sales analytics, ethical challenges in sales, future trends in sales management.

## **Suggested Readings:**

- Still, R. R., Cundiff, E. W., & Govoni, N. A. P. (2007). *Sales Management: Decisions, Strategies, and Cases*, Pearson Education.
- Johnston, M. W., & Marshall, G. W. (2021). *Sales Force Management*, McGraw-Hill.
- Tanner, J., Honeycutt, E., & Erffmeyer, R. (2013). *Sales Management*, Pearson Education.
- Jobber, D., & Lancaster, G. (2015). *Selling and Sales Management*, Pearson.

# **Service Marketing**

## **Credit – 3**

### **Course Objectives:**

1. To introduce students to the characteristics and significance of services in the modern economy.
2. To understand consumer behavior, service expectations, and service quality measurement.
3. To explore the role of the marketing mix in designing and delivering services effectively.
4. To analyze strategies for service promotion, distribution, and customer relationship management.

### **Course Outcomes:**

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

1. Explain the fundamentals of services marketing and its growing importance.
2. Understand consumer expectations, service quality, and customer satisfaction.
3. Apply marketing mix strategies to design and promote services.
4. Analyze service delivery methods and their impact on customer experience.

### **Unit 1: Introduction to Services Marketing**

Nature and importance of services, differences between goods and services, classification of services, challenges in services marketing, service consumption process.

### **Unit 2: Understanding Service Customers**

Customer expectations and perceptions, service positioning, measuring service quality (SERVQUAL model), understanding service gaps, customer satisfaction and service recovery.

### **Unit 3: Service Marketing Mix**

Service design and development, service blueprinting, role of service processes, pricing strategies for services, dynamic pricing, ethical considerations in pricing services.

### **Unit 4: Service Distribution and Promotion**

Service delivery channels, role of service intermediaries, digital distribution in services, integrated marketing communication for services, managing service personnel, customer participation in service delivery.

### **Suggested Readings:**

- Lovelock, C. H., Wirtz, J., & Chatterjee, J. (2011). *Services Marketing: People, Technology, Strategy*, Pearson.
- Zeithaml, V. A., Bitner, M. J., Gremler, D. D., & Pandit, A. (2011). *Services Marketing*, Tata McGraw Hill.
- Nargundkar, R. (2010). *Services Marketing: Text and Cases*, Tata McGraw Hill.

## **Global Marketing Management**

**Credits- 3**

**Course Objectives:**

1. To introduce students to the fundamentals of global marketing and its significance in today's interconnected world.
2. To develop an understanding of global market dynamics, entry strategies, and international trade regulations.
3. To explore global marketing mix decisions, including product, pricing, distribution, and communication strategies.
4. To analyze contemporary trends in global marketing, including digital globalization and sustainability.

**Course Outcomes:**

1. By the end of the semester, students should be able to:
2. Understand the scope and challenges of marketing in a global environment.
3. Develop and implement global marketing strategies for diverse markets.
4. Adapt marketing mix elements to international markets while considering cultural, economic, and legal factors.
5. Evaluate emerging trends such as digital globalization, sustainability, and ethical issues in global marketing.

**Unit 1: Introduction to Global Marketing**

Globalization and its impact on marketing; scope of global marketing; differences between domestic and international marketing; global marketing environment – cultural, economic, political, and legal factors; international trade theories; trade agreements (WTO, IMF, World Bank); global market opportunities and challenges.

**Unit 2: Global Market Entry and Strategic Planning**

International market segmentation and selection; modes of market entry – exporting, franchising, joint ventures, direct investment; global strategic alliances; risk assessment in global markets; international trade regulations and government policies; ethical issues in global market entry.

**Unit 3: Global Marketing Mix**

Standardization vs. adaptation of product strategies; global branding and positioning; managing product life cycle across international markets; global pricing approaches – cost-based, competition-based, and value-based pricing; international distribution channels and supply chain management; integrated global communication strategies – advertising, public relations, and digital marketing.

**Unit 4: Contemporary Issues and Trends in Global Marketing**

Impact of digital transformation and e-commerce in global marketing; sustainability and corporate social responsibility in global markets; crisis management in international business; emerging markets and their role in global marketing; future trends – AI, data analytics, and consumer insights in international marketing.

**Text Books:**

- Cateora, P. R., Graham, J. L., & Gilly, M. C., *International Marketing*, McGraw-Hill.
- Keegan, W. J., & Green, M. C., *Global Marketing*, Pearson Education.

**Reference Books:**

- Czinkota, M. R., Ronkainen, I. A., & Moffett, M. H., *International Business and Global Marketing*, South-Western Cengage Learning.
- Hollensen, S., *Global Marketing: A Decision-Oriented Approach*, Pearson Education.

## **Strategic Brand Management**

**Credits- 3**

### **Course Objectives:**

1. To understand the fundamental concepts of branding and its strategic importance in competitive markets.
2. To explore brand equity, brand positioning, and brand identity frameworks.
3. To develop skills in managing brand portfolios, brand extensions, and brand revitalization.
4. To analyze contemporary challenges in brand management, including digital branding and global branding strategies.

### **Course Outcomes:**

By the end of the semester, students should be able to:

1. Explain the role of branding in business strategy and consumer decision-making.
2. Apply brand positioning and brand equity models to assess brand performance.
3. Design brand-building strategies, including extensions, co-branding, and repositioning.
4. Evaluate the impact of digital branding and global trends on brand management.

### **Unit 1: Introduction to Strategic Brand Management**

Meaning and importance of branding; role of brands in consumer and business markets; brand vs. product; components of a strong brand; evolution of branding and key branding concepts; challenges in brand management.

### **Unit 2: Brand Identity, Positioning, and Equity**

Understanding brand identity and personality; defining brand positioning and differentiation; value proposition and unique selling proposition (USP); brand resonance and brand equity models.

### **Unit 3: Brand Architecture and Brand Growth Strategies**

Managing brand portfolios; brand hierarchy and brand relationships; brand extensions, co-branding, and ingredient branding; brand revitalization and rebranding; managing brand crises and reputation; private labels vs. national brands

### **Unit 4: Contemporary Issues in Brand Management**

Role of digital marketing and social media in brand management; challenges of global branding; cultural considerations in international branding; brand ethics.

### **Text Books:**

- Aaker, D. A., *Managing Brand Equity*, Free Press.
- Keller, K. L., *Strategic Brand Management: Building, Measuring, and Managing Brand Equity*, Pearson Education.

## **Digital Marketing**

**Credits – 3**

### **Course Objectives:**

1. To provide a comprehensive understanding of digital marketing concepts and their relevance in the modern business landscape.
2. To explore various online marketing tools and techniques used for customer engagement and business growth.
3. To analyze consumer behavior in the digital space and its implications for marketing strategy.
4. To develop skills in designing and executing effective digital marketing strategies.

### **Course Outcomes:**

By the end of the course, students should be able to:

1. Explain key concepts and trends in digital marketing.
2. Evaluate and apply digital marketing tools to optimize business performance.
3. Analyze the online consumer journey and leverage digital touchpoints effectively.
4. Design and implement a comprehensive digital marketing strategy aligned with business goals.

### **Unit 1: Introduction to digital marketing**

Overview of digital marketing, evolution, drivers, application, benefits; internet marketing; business models; e-commerce; digitized value chain; integrated marketing communication.

### **Unit 2: E-marketing**

E-marketing and CRM, online advertising, sales and trade promotion, digital marketing optimization, online marketing mix, segmentation, targeting, positioning, online value, online consumer journey, online branding, traffic building.

### **Unit 3: Digital marketing tools**

Content marketing; online communities; mobile marketing; augmented, virtual and mixed reality; social networks; search engine, website, email, gamification, blogs.

#### **Unit 4: Digital marketing strategy**

Digital marketing framework, internal assessment, objectives planning, roadmap, designing communication mix, online lead management, campaign management, managing revenue, implementation challenges.

#### **Suggested Readings:**

- Puneet Singh Bhatia (2020), Fundamentals of Digital Marketing, 2<sup>nd</sup> Edition, Pearson.
- Vandana Ahuja (2018), Digital Marketing, Oxford University Press.
- Annmarie Hanlon (2019), Digital Marketing, Strategic Planning & Integration, Sage.
- Dinesh Kumar (2021), Marketing in the Digital Age, Sage.

## **Retailing Management**

### **Credits- 3**

#### **Course Objectives:**

1. To provide an understanding of the key dimensions of the retail industry in the evolving business landscape.
2. To explore retailing strategies for developing a sustainable competitive advantage.
3. To analyze retail store design, location selection, and merchandising strategies.
4. To examine the role of technology, digitalization, and customer experience in modern retail management.

#### **Course Outcomes:**

By the end of the course, students should be able to:

1. Understand the dynamics of the retail industry and emerging retail trends.
2. Develop strategic retail decisions to gain a competitive edge.
3. Analyze retail store formats, location strategies, and merchandising techniques.
4. Evaluate customer experience, retail audits, and digital retail transformation.

#### **Unit 1: Introduction to Retailing**

Definition, importance, scope, and evolution of retailing; theories of retail development; retail formats; retail competition; emerging trends in retailing; Indian and global retail sector.

#### **Unit 2: Retail Strategy and Merchandise Planning**

Retail strategic planning and competitive positioning; merchandise planning and buying; pricing strategies in retail; category management; customer relationship management in retail; legal and ethical issues.

#### **Unit 3: Store Location, Design, and Customer Experience**

Types of store locations; location selection and trading area analysis; store layout, design, and visual merchandising; retail communication mix; customer service strategies; the GAPs model in retailing

#### **Unit 4: Retail Analytics, Technology, and Emerging Trends**

Retail information systems; role of big data and analytics in retail decision-making; e-retailing and omnichannel retailing; global retailing strategies; sustainability and green retailing.

**Suggested Readings:**

- Berman, B., Evans, J. R., & Mathur, M., *Retail Management*, Pearson Education.
- Pradhan, S., *Retailing Management – Text and Cases*, Tata McGraw Hill.
- Levy, M., Weitz, B. A., & Pandit, A., *Retailing Management*, Tata McGraw Hill.
- Dunne, P. M., Lusch, R. F., & Carver, J. R., *Retailing*, Cengage Learning.

## **Marketing Channels**

**Credits- 3**

**Course Objectives:**

1. To understand the structure, functions, and significance of marketing channels.
2. To analyze channel design, selection, and management strategies.
3. To examine the role of logistics, supply chain, and technology in marketing channels.
4. To evaluate emerging trends, challenges, and global perspectives in channel management.

**Course Outcomes:**

By the end of the course, students should be able to:

1. Explain the role and importance of marketing channels in business strategy.
2. Design and manage effective channel structures for different products and markets.
3. Assess the impact of logistics, supply chain, and digital technologies on channel efficiency.
4. Analyze emerging trends and global developments in marketing channels.

**Unit 1: Introduction to Marketing Channels**

Definition, importance, and functions of marketing channels; types of channel intermediaries; channel flows and levels; role of distribution in the marketing mix; channel dynamics and conflict management.

**Unit 2: Channel Design and Strategy**

Factors influencing channel design; channel selection criteria; multi-channel and omnichannel strategies; retail and wholesale channels; franchising and strategic channel alliances.

**Unit 3: Logistics, Supply Chain, and Technology**

Role of logistics in channel management; supply chain integration; inventory and warehouse management; role of technology in channel operations; e-commerce and digital distribution channels.

**Unit 4: Emerging Trends and Global Perspectives**

Channel innovations and automation; sustainable and ethical channel practices; global marketing channels and international distribution; impact of regulations and policies on channel management.



**Suggested Readings:**

- Rosenbloom, B. (2018), *Marketing Channels*, Cengage.
- Coughlan, A. T., Anderson, E., Stern, L. W., & El-Ansary, A. I. (2016), *Marketing Channels*, Pearson.
- Kotler, P., Keller, K. L., Koshy, A., & Jha, M. (2022), *Marketing Management*, Pearson.
- Chopra, S. (2021), *Supply Chain Management: Strategy, Planning, and Operation*, Pearson.

## **Marketing Analytics**

**Credits - 3**

**Course Objectives:**

1. To provide an understanding of different types of marketing analytics and their applications.
2. To explore models and metrics for assessing online consumer experience.
3. To introduce artificial intelligence and machine learning approaches in marketing decision-making.
4. To develop analytical skills for evaluating and optimizing marketing strategies.

**Course Outcomes:**

By the end of the course, students should be able to:

1. Explain various types of marketing analytics and their relevance.
2. Apply artificial intelligence and machine learning techniques in marketing analytics.
3. Analyze online consumer experience using key metrics.
4. Evaluate and optimize marketing efforts through data-driven insights.

**Unit1: Introduction to marketing analytics**

Overview of marketing analytics, marketing research, data management for analytics, types of analysis – descriptive, predictive, prescriptive, data visualization

**Unit 2: Artificial intelligence and machine learning**

Application of AI in marketing, common terminologies, analytical methods for supervised and unsupervised learning, emerging analytical approaches.

**Unit 3: Understanding customer**

Concepts of customer journey, lifetime value, acquisition; retention churn analytics; metrics for tracking customer experience; customer portfolio management.

**Unit 4: Digital analytics**

Product analytics, pricing, segmentation analytics, positioning, variables and techniques of marketing mix modelling, web metrics, A/B testing, SEM, SEO, social media metrics, app marketing metrics

**Note:** Excel, R, Python, SPSS or any other appropriate tool would be used to give hands-on, practical exposure to students.

**Suggested Readings:**

- Seema Gupta, Avadhoot Jathar (2021), Marketing Analytics, Wiley.
- Moutusy Maity & Pavankumar Gurazada (2021), Marketing Analytics for Strategic Decision-Making, Oxford University Press.
- Joseph Hair and Dana E. Harrison and Haya Ajjan (2022), Essentials of Marketing Analytics, McGrawHill.

## **Customer Acquisition, Retention, and Loyalty**

**Credits- 3****Course Objectives:**

1. To understand the key concepts and strategies of customer acquisition, retention, and loyalty.
2. To analyze the factors influencing customer relationships and engagement.
3. To evaluate tools and metrics for measuring customer retention and loyalty.
4. To examine emerging trends and best practices in customer relationship management.

**Course Outcomes:**

1. By the end of the course, students should be able to:
2. Explain the strategies and challenges in customer acquisition, retention, and loyalty.
3. Develop customer-centric approaches to enhance long-term relationships.
4. Apply tools and metrics to measure and improve customer retention and loyalty.
5. Assess the impact of digital transformation on customer engagement.

**Unit 1: Introduction to Customer Acquisition, Retention, and Loyalty**

Concepts and importance of customer acquisition, retention, and loyalty; customer lifecycle management; factors influencing customer behavior; role of technology in customer engagement.

**Unit 2: Strategies for Customer Acquisition and Retention**

Customer segmentation and targeting; lead generation techniques; onboarding strategies; personalization and customer experience management; churn analysis and retention strategies.

**Unit 3: Customer Loyalty and Relationship Management**

Loyalty programs and reward strategies; customer advocacy and brand engagement; emotional vs. transactional loyalty; customer relationship management (CRM) tools and analytics.

**Unit 4: Metrics, Trends, and Innovations**

Key performance indicators (KPIs) for acquisition, retention, and loyalty; customer lifetime value (CLV); Net Promoter Score (NPS); emerging trends in customer loyalty, AI-driven engagement, and omnichannel experience.

**Suggested Readings:**

- Kumar, V. (2018), Customer Relationship Management: Concepts and Technologies, Wiley.

- Zeithaml, V. A., Bitner, M. J., & Gremler, D. D. (2022), *Services Marketing: Integrating Customer Focus Across the Firm*, McGraw Hill.
- Kotler, P., Keller, K. L., Koshy, A., & Jha, M. (2022), *Marketing Management*, Pearson.
- Peppers, D., & Rogers, M. (2017), *Managing Customer Relationships: A Strategic Framework*, Wiley.

## **Contemporary Issues in Marketing Management**

**Credits- 3**

### **Course Objectives:**

1. To explore emerging trends and challenges in modern marketing.
2. To analyze the impact of digital transformation, sustainability, and globalization on marketing strategies.
3. To understand the role of consumer behavior and ethics in shaping marketing decisions.
4. To evaluate the influence of data analytics and technology in contemporary marketing practices.

### **Course Outcomes:**

By the end of the course, students should be able to:

1. Identify and analyze key contemporary issues affecting marketing management.
2. Develop strategic responses to evolving consumer expectations and market trends.
3. Apply technological advancements and data-driven insights to marketing decision-making.
4. Assess ethical and sustainability concerns in modern marketing practices.

### **Unit 1: Emerging Trends in Marketing**

The evolution of marketing in a digital world; personalization and hyper-targeting experience-driven marketing; influencer and creator economy; growth of subscription-based marketing.

### **Unit 2: Sustainability and Ethical Marketing**

Corporate social responsibility (CSR) and marketing; green marketing strategies; ethical consumerism; inclusive and diversity-driven marketing; regulatory and compliance issues in marketing.

### **Unit 3: Data-Driven and AI-Enabled Marketing**

Role of big data and AI in marketing decision-making; predictive analytics; customer journey mapping using technology; automation in marketing; challenges of data privacy and security.

### **Unit 4: Globalization and Cross-Cultural Marketing**

Impact of globalization on marketing strategies; cross-cultural consumer behavior; localization vs. standardization; emerging markets and new-age business models; geopolitical influences on marketing.

### **Suggested Readings:**

- Kotler, P., Kartajaya, H., & Setiawan, I. (2021), *Marketing 5.0: Technology for Humanity*, Wiley.

- Sheth, J. N. (2021), *The Global Rule of Three: Competing with Conscious Strategy*, Springer.
- Chaffey, D., & Ellis-Chadwick, F. (2022), *Digital Marketing: Strategy, Implementation and Practice*, Pearson.
- Kumar, V., & Reinartz, W. (2018), *Customer Relationship Management: Concept, Strategy, and Tools*, Springer.
- Solomon, M. R. (2022), *Consumer Behavior: Buying, Having, and Being*, Pearson.

# **Area- International Business**

## **International Business Strategy**

**Credits – 3**

### **Course Objective:**

To explore the concepts and techniques of the essential elements of International HRM and to enable the students to recognise its critical issues. The course aims to understand HRM concerns in the cross cultural scenario.

### **Course Outcomes:**

1. Understand the impact of culture on Human Resource Management and how HRM differs across cultures
2. Comprehend issues and challenges pertaining to International HRM
3. Understand how International HRM can develop competencies in dealing with cross cultural issues
4. Understand the different functional roles of HRM in various international contexts like recruitment, selection, performance management, training, compensation and repatriation.
5. Understand the issues and trends in International Industrial relations

### **Unit 1**

Introduction to concepts of culture and nationality; Impact of culture on international business environment; Hofstede's approach; cross cultural differences at work; strategies to manage workforce diversity; Diversity management programme; International Human Resource Management: Difference between domestic and international HRM.

### **Unit 2**

International Workforce planning and staffing: Issues in supply of international human resources; International Recruitment; International staffing choice, different approaches to multinational staffing decisions; Types of international assignments; Selection criteria and techniques; Successful expatriation, Causes of expatriate failure, female expatriation

### **Unit 3**

Performance appraisal: Criteria for performance appraisal, Variables that influence expatriate performance appraisal. Issues and challenges in international performance management; Compensation: Objectives of expatriate compensation plan, Factors affecting international compensation, Approaches to expatriate compensation: Going rate approach, Balance sheet approach, Cultural impact on compensation policy.

### **Unit 4**

Diversity, Managing diversity, Variations creating diversity, Managing diversity in hiring and other HR practices on an IHRM level; Country specific factors affecting IHRM practices; Basic IHRM theories (Hertzberg's 2 Factor Theory, Hofstede's 4 Dimensions of Culture, Different interpretations of Maslow's Hierarchy of Needs across cultures); Leadership styles across different operating countries and cultures; Issues in managing globally diverse and dispersed teams; HR Outsourcing, IHRM as a source of competitive advantage.

**Text Books:**

- Sengupta Nilanjan, Bhattacharya Mousumi-International Human Resource Management, Excel Books.
- Dowling J.P, Festing, Engle-International Human Resource Management, Cengage Learning.
- Bhattachaya Kumar Deepak-Cross Cultural Management, PHI Learning.

**Additional Readings:**

- Schuler. R.S, Briscoe. D.R and Claus: International Human Resource Management, Routledge New York.
- Edwards, T. & Rees, C., International Human Resource Management: Globalization, National Systems and Multinational Companies, London: Financial Times/ Prentice Hall.

## **International Trade: Policies and Strategies**

**Credits – 3**

**Course Objective:**

To provide students with an in-depth understanding of international trade policies, regulatory frameworks, and strategic approaches adopted by nations and businesses to enhance global trade competitiveness.

**Course Outcomes:**

1. Analyze international trade theories and their application in global trade decision-making.
2. Evaluate trade policies, agreements, and regulations to assess their impact on economies and businesses.
3. Develop strategic trade approaches for firms and policymakers to enhance global competitiveness.
4. Assess emerging trends and challenges in international trade to anticipate future developments.

**Unit-1:**

Fundamentals of international trade, classical and modern trade theories (Absolute and Comparative Advantage, Heckscher-Ohlin Model, New Trade Theory), trade drivers, trade patterns, and the role of trade in economic development.

**Unit-2:**

Trade policies and instruments (tariffs, quotas, subsidies, non-tariff barriers), global trade agreements (WTO, RCEP, NAFTA/USMCA, EU), protectionism vs. free trade, trade regulations, and their impact on businesses and economies

.

**Unit-3:**

Strategic trade approaches for firms and governments, export promotion, import substitution,

trade liberalization, industrial policies, role of multinational corporations (MNCs), supply chain management, and regional trade integration.

#### **Unit-4:**

Emerging trends and challenges in international trade, trade wars, economic nationalism, digital trade, sustainability in global trade, impact of technology and e-commerce on trade strategies, and future trade dynamics.

#### **Suggested Readings:**

- Krugman, P. R., Obstfeld, M., & Melitz, M. J. – *International Economics: Theory and Policy* (Pearson)
- Salvatore, D. – *International Economics* (Wiley)
- Carbaugh, R. J. – *International Economics* (Cengage Learning)
- Hill, C. W. L., & Hult, G. T. M. – *International Business: Competing in the Global Marketplace* (McGraw-Hill)
- Bhagwati, J. – *In Defense of Globalization* (Oxford University Press)
- Feenstra, R. C., & Taylor, A. M. – *International Trade* (Worth Publishers)
- World Trade Organization (WTO) – *World Trade Reports* (Latest Editions)

## **India's Foreign Trade and Investment**

**Credits - 3**

#### **Course Objective:**

The objective of this course is to acquaint students with the structure and policy framework of India's foreign trade and investments and enable students to explore India's position in the international paradigm of business and trade. The course will also provide understanding about the role of the Indian government in promoting India's foreign trade, the business relations of India with different countries & markets and prospects of India's Foreign Trade.

#### **Course Outcomes:**

1. To understand India's position in the international paradigm of business and trade.
2. To equip the students to critically evaluate India's foreign trade policy and its economic relations.
3. To make students realize the role of the Indian government in promoting India's foreign trade.
4. To develop the skills among students to anticipate various regulatory and legal aspects related to India's foreign trade.

#### **Unit 1: Introduction to India's Foreign Trade and Investment:**

History and introduction to foreign trade, Pattern and structure of India's foreign trade; Promotional measures in foreign trade by Indian government, India's trade in service; Terms of trade; India on the world trading map; Analysis of thrust export products and markets; Regulatory bodies in India dealing with foreign trade; India's foreign investment policy and flows.

#### **Unit 2: Foreign Trade Policy and Economic Relations:**

Policy making body and regulatory framework; Trends and developments in India's foreign trade policy; Bilateralism and multilateralism in India's trade relations; India's trade and economic relations with EU and other regional groupings; India and regional economic cooperation in South Asia; India's Bilateral Investment Treaties and DTAA's.

### **Unit 3: Export Promotion Measures and Institutional Arrangements:**

The import and export control orders; The Import export licensing system; Export promotion measures and schemes; Export Incentives; EXIM Bank of India; EXIM policy; Export and trading houses, import facilities for exports; Export processing/special economic zones (EPZs/SEZs) and 100% EOU's – Policy framework and operational aspect. Export promotion councils, DIPP; Commodity boards/export development authorities; Infrastructure Support – Transportation and warehousing infrastructure, Indian ports and shipping system.

### **Unit 4: Foreign Exchange facilities and Regulations:**

Foreign exchange facilities and exchange rate mechanism; Regulatory framework – FEMA and its objectives and provisions; Other acts and regulations.

### **References Books:**

- Ministry of Commerce, Handbook of Procedures, Vols. I and II, Government of India, New Delhi.
- Ministry of Commerce, Export Import Policy, Government of India, New Delhi.
- Economic Survey– Compiled by the Government of India, Ministry of Finance, Department of Economic Affairs – Latest Edition.

### **Additional Readings:**

- Meier G.M., Trade Policy and Development, in Scott Maurice and Deepak Lal, Public Policy and Economic Development – Essays in Honour of Ian Little, Oxford
- Nayyar Deepak, India's Export Performance 1970-85, Underlying Factors and Constraints, in Robert E.B. Lucas and Gustav F. Pipanek (ed.), Indian Economy Recent Development and Future Prospects, New Delhi.

## **Transnational and Cross Cultural Marketing**

**Credits - 3**

### **Course Objective:**

The objective of the course is to identify and understand the various cultural and regional variables and how they impact businesses in the short-term and long-term future; what companies can do to utilise these variables and mitigate their impact. The objective is to understand the nuances of cross-cultural and cross-border activities such as advertising, pricing, supply chain management, market entry, branding and customization etc.

### **Course Outcome:**

1. Identify the key skills that a business cross-cultural manager should have.
2. Understand how the business environment affects a business; articulate the various factors and how they affect a business.
3. Understand the various tools and actions that a business has and can undertake to find a beneficial situation within a given operating business environment.



### **Unit 1**

Introduction; Reasons behind international expansion; Historical Transnational trade; types of MNCs; Stages of International Exposure; Marketing across cultures and countries, Using Social Media tools.

### **Unit 2**

National-level variables, regional trading blocs; Physical variables, Geographic distance, Grouping of industries in specific areas/regions, Environment specific impacts, Distribution of Natural Resources; Cultural Variables, Impact on doing business (Institutions, Distance, Power, Decision Making, People Management, Delegation, Corruption, Quality Benchmarks Etc.); Porter's Diamond Model; Positioning; Protectionism and its impact on international trade.

### **Unit 3**

Porter's Five Forces Model; Ghemawat's CAGE framework; Globalisation; Demographics and Segmentation; Assessing Market Potential, How markets behave, Selling in specific markets (Developed, Developing, Post-Communist); "Right" Market to enter and "Right" Time to enter; What (mis-selling, outdated products), Where, Why, and How are we selling; Customer needs (of the non-home market); Packaging; Selling to and in emerging markets, unique customer needs, upward social mobility, Tier 1, 2, 3 and 4 customers and markets, purchasing power and willingness to pay; Concerns and issues with available market analysis tools.

### **Unit 4**

Strategic (and global) Alliances; Global level of competition; Product Development; People concerns (Manufacturing facilities, quality of the available workforce) E-Commerce and Changing Marketing Paradigms; Supply Chain as a source of International Advantages; Managing International Sales; International Advertising and Promotions; Pricing for international markets, Pricing wars, Approaches – Fullcost v/s Variable, Skimming v/s Penetration (non-numeric), value of money, factors influencing pricing; Implementing a Global Marketing Strategy. Support Mechanisms for Exports and International Trade, Managing Risks in International Trade.

### **Text Books:**

- Cateora, Philip R. & Graham, John L.: International Marketing, Tata McGraw Hill.
- Joshi, Rakesh Mohan: International Marketing, Oxford University Press.

### **Additional Readings:**

- Keega, Warren J.: Global Marketing Management, Prentice Hall India.
- Muhlbache, Hans: International Marketing-A Global Perspective, Cengage Learning.
- Varshney & Bhattacharya: International Marketing Management, Sultan Chand & Sons.

## **Multinational Business Finance**

**Credits - 3**

**Course Objective:**

The objective of the course is to familiarize the students with the International Monetary System and Financial Institutions. Functioning of the Foreign Exchange Markets, Financial Management of a multinational firm will be the essential component of this course.

**Course Outcome:**

1. Students shall have a fair understanding of the MNCs operations with respect to finance.
2. They will understand the functioning of Multilateral Agencies and their role in global economic development.
3. Students will have the understanding of the different aspects of the foreign exchange markets
4. Students will have the understanding of varied aspects related to international payment systems.

**Unit 1: Multinational Business Finance:**

MNCs (Multinational Corporations) and transnational corporations, Difference between domestic and International financial management, Motivations for International finance. International Monetary System - The Gold standard, The Bretton Woods system, the flexible exchange, alternative exchange rate system, the European monetary system, Euro and its implications for Indian banking, International Financial Institutions – International Monetary Fund (IMF), Asian Development Bank (ADB), International Bank for Reconstruction and Development (IBRD), Bank for International Settlement (BIS) and Organization for Economic Cooperation and Development (OECD).

**Unit 2: The Foreign Exchange Markets:**

Introduction, types: Global and Domestic market, spot market and forward market; rates: direct and indirect quotations, bid-ask spread; Functions of the Foreign Exchange Markets; determination of forward premiums and discounts, interest arbitrage – covered interest arbitrage and interest parity theory – forecasting of foreign exchange rates.

**Unit 3: Financial management of the Multinational Firm:**

Cost of Capital and Capital Structure of a Multinational Firm – determining capital structure components, Cost of capital for MNCs (Multinational Corporations) and Domestic Firms, Multinational capital budgeting – Problems and issues in foreign investment analysis.

**Unit 4: Payment Systems:**

Payment terms and financing international trade, international flow of funds and portfolio investment in India, FDI (Foreign Direct Investment) vs. FIIs (Foreign Institutional Investors), investment strategies of FIIs in India, FIIs and volatility, impact of FIIs investment on stock markets and public policy. Netting (with numerical), pooling, leading and lagging as international payment settlement.

**Text Books:**

- Eiteman, David K. Stonehill, Arthur I., and Moffett, Michael H. (2001). Multinational Business Finance (15th ed.). Pearson.
- Shapiro, Allen C. (1995). Multinational Financial Management, Prentice Hall India.

**Suggested Readings:**

- Levi, Maurice (1996), International Finance, McGraw Hill Inc., (4th ed.). New York, New Delhi.
- Madura, J. (2009). International Financial Management (10th ed.). New Delhi, Cengage Learning.

- Buckley, A. (2004). Multinational Finance (5th ed.). Pearson Education

## **International Joint Ventures, Mergers and Acquisitions**

### **Credits- 3**

#### **Course objective:**

This course explores the strategic, financial, and legal aspects of international joint ventures, mergers, and acquisitions. It equips students with skills in valuation, due diligence, deal structuring, and post-merger integration, preparing them to analyze and execute cross-border transactions effectively.

#### **Course Outcomes:**

Upon successful completion of the course the student should be able to:

1. Understand the strategic role of international joint ventures, mergers, and acquisitions in global business expansion.
2. Analyze financial, legal, and regulatory frameworks affecting cross-border business transactions.
3. Apply decision-making skills in partner selection, valuation, due diligence, and integration strategies.
4. Evaluate post-merger challenges, including cultural integration, operational restructuring, and performance measurement.

#### **Unit 1: Fundamentals of International Joint Ventures, Mergers, and Acquisitions**

Concepts, scope, and significance of international joint ventures, mergers, and acquisitions in global business. Types and structures of joint ventures, mergers, and acquisitions. Motives for cross-border collaborations, Challenges in international business combinations.

#### **Unit 2: Strategic Considerations and Deal Structuring**

Strategic rationale behind joint ventures, mergers, and acquisitions. Partner selection criteria, negotiation strategies, and structuring of agreements. Valuation methodologies, due diligence process, financial risk assessment, and synergy realization. Governance models, decision-making frameworks, and best practices for managing strategic alliances and acquisitions. Case studies on successful and failed international transactions.

#### **Unit 3: Legal, Regulatory, and Financial Framework**

International laws, regulations, and policies governing joint ventures, mergers, and acquisitions. Antitrust and competition laws, foreign investment regulations, taxation policies, and intellectual property rights in cross-border deals. Funding mechanisms, capital structuring, financial reporting standards, and post-acquisition financial integration. Role of international trade agreements and global business combinations.

#### **Unit 4: Post-Merger Integration and Performance Measurement**

Integration challenges in international mergers and joint ventures, including cultural alignment, operational restructuring, and human resource management. Leadership transition, change management, communication strategies, and conflict resolution in multinational business

entities. Performance measurement through financial and non-financial metrics, key performance indicators (KPIs), and long-term value creation. Case studies on integration successes and failures in global markets.

#### **Reference Books:**

- Gaughan, Patrick A. – *Mergers, Acquisitions, and Corporate Restructurings* (Wiley)
- Sherman, Andrew J. – *Mergers and Acquisitions from A to Z* (HarperCollins)
- Sudarsanam, Sudi – *Creating Value from Mergers and Acquisitions: The Challenges* (Pearson)
- Reed, Stanley, Lajoux, Alexandra, & Nesvold, H. Peter – *The Art of M&A: A Merger, Acquisition, and Buyout Guide* (McGraw-Hill)
- Weston, J. Fred, Mitchell, Mark L., & Mulherin, J. Harold – *Takeovers, Restructuring, and Corporate Governance* (Pearson)
- Cartwright, Susan & Cooper, Cary L. – *Managing Mergers, Acquisitions and Strategic Alliances: Integrating People and Cultures* (Butterworth-Heinemann)
- Bleeke, Joel & Ernst, David – *Collaborating to Compete: Using Strategic Alliances and Acquisitions in the Global Marketplace* (Wiley)

## **Cross Cultural Human Resource Management**

### **Credits – 3**

#### **Course Objective:**

To explore the concepts and techniques of the essential elements of International HRM and to enable the students to recognise its critical issues. The course aims to understand HRM concerns in the cross cultural scenario.

#### **Course Outcomes:**

1. Understand the impact of culture on Human Resource Management and how HRM differs across cultures
2. Comprehend issues and challenges pertaining to International HRM
3. Understand how International HRM can develop competencies in dealing with cross cultural issues
4. Understand the different functional roles of HRM in various international contexts like recruitment, selection, performance management, training, compensation and repatriation.

### **Unit 1**

Introduction to concepts of culture and nationality; Impact of culture on international business environment; Hofstede's approach; cross cultural differences at work; strategies to managing workforce diversity; Diversity management programme; International Human Resource Management: Difference between domestic and international HRM.

### **Unit 2**

International Workforce planning and staffing: Issues in supply of international human resources; International Recruitment; International staffing choice, different approaches to

multinational staffing decisions; Types of international assignments; Selection criteria and techniques; Successful expatriation, Causes of expatriate failure, female expatriation.

### **Unit 3**

Performance appraisal: Criteria for performance appraisal, Variables that influence expatriate performance appraisal. Issues and challenges in international performance management; Compensation: Objectives of expatriate compensation plan, Factors affecting international compensation, Approaches to expatriate compensation: Going rate approach, Balance sheet approach, Cultural impact on compensation policy

### **Unit 4**

Diversity, Managing diversity, Variations creating diversity, Managing diversity in hiring and other HR practices on an IHRM level; Country specific factors affecting IHRM practices; Basic IHRM theories (Hertzberg's 2 Factor Theory, Hofstede's 4 Dimensions of Culture, Different interpretations of Maslow's Hierarchy of Needs across cultures); Leadership styles across different operating countries and cultures; Issues in managing globally diverse and dispersed teams; HR Outsourcing, IHRM as a source of competitive advantage.

### **Text Books:**

- Sengupta Nilanjan, Bhattacharya Mousumi-International Human Resource Management, Excel Books.
- Dowling J.P, Festing, Engle-International Human Resource Management, Cengage Learning.
- Bhattachaya Kumar Deepak-Cross Cultural Management, PHI Learning.

### **Additional Readings:**

- Schuler. R.S, Briscoe. D.R and Claus: International Human Resource Management, Routledge New York.
- Edwards, T. & Rees, C., International Human Resource Management: Globalization, National Systems and Multinational Companies, London: Financial Times/ Prentice Hall.

## **Legal Dimensions of International Business**

### **Credits – 3**

### **Course Objective:**

The objective of this course is to acquaint students with the legal dimensions of international business and enable them to formulate strategies compatible with laws and treaties governing international business operations

**Course Outcome:**

1. Learn globally followed best practices to draft and negotiate contracts.
2. Learn to review and critically analyse the contracts with pros and cons to different parties to it.
3. Learn legal aspects of international investments.
4. Comprehend practical aspects of international laws, agreements and the various modes and methods of growth in relation to cross-border mergers and acquisitions.

**Unit 1: Legal Framework of International Business:**

Nature and complexities; International conventions and trade law; Civil laws and common laws, code and common laws and their implications to business; International business contract– Legal provisions; Payment terms; International sales agreements.

**Unit 2: Laws Relating to Licensing:**

Regulations and treaties relating to licensing, franchising, joint ventures, patents and trademarks, technology transfer and telecommunications; Restrictions on trade in endangered species and other commodities as based on international conventions; Taxations treaties.

**Unit 3: Laws Relating to International Investments and Cross Border Mergers and Acquisitions:**

Concept and definitions of investment and investor in international law, customary international laws, international investment agreements; Concept of Cross-border merger and acquisition, primary methods of merger and acquisition; Common, consolidated and triangular mergers, reverse triangular merger; Cross-border merger and acquisition motives, Foreign Direct Investment motive, financial motive, strategic motive, international growth in relation with cross border mergers and acquisitions.

**Unit 4: Law Relating to Foreign Exchange:**

Objectives and definitions under FEMA, 1999; Current account transactions and capital account transactions; Foreign direct investment in India and abroad; Acquisition and transfer of immovable property in India and abroad; Establishment of branch, office etc. in India; Realization and repatriation of foreign exchange; Authorized person; Penalties and enforcement; Powers of central government; Adjudication, appeal and compounding; Offences and penalties.

**Text Books:**

- Chuah, J. C. T. (2014) . Law of International Trade. Sweet and Maxwell, London.
- Jain, R. (2000). Foreign Exchange Management Law and Practice. Vidhi. New Delhi.

**Additional Readings:**

- Indian Council of Arbitration Case Law on UNCITRAL Model Laws on International Commercial Arbitration. New Delhi.
- Pam borides, G.P. (1999). International Shipping Law: Legislation and Enforcement, Kluwer Law International. London.

## **Contemporary Issues in International Business**

## **Credits – 3**

### **Course objective:**

This course examines key contemporary issues shaping international business, including globalization, trade policies, geopolitical risks, sustainability, digital transformation, and emerging market dynamics. It equips students with analytical skills to navigate challenges and opportunities in the global business environment.

### **Course Outcomes:**

Upon successful completion of the course the student should be able to:

1. Understand emerging trends and challenges affecting international business in a rapidly evolving global economy.
2. Analyze the impact of geopolitical, economic, technological, and environmental factors on international trade and investment.
3. Evaluate global business strategies in response to regulatory changes, digital transformation, and sustainability concerns.
4. Develop insights into contemporary issues such as trade wars, global supply chain disruptions, digital trade, and ethical considerations in international business.

### **Unit 1: Global Economic and Geopolitical Challenges**

Recent trends in globalization, regionalism, and protectionism. The impact of geopolitical conflicts, trade wars, economic sanctions, and global financial crises on international business. Role of institutions like the WTO, IMF, and World Bank in regulating global trade and investment. The rise of emerging markets and their influence on global business.

### **Unit 2: Technological Disruptions and Digital Transformation**

The role of digitalization, artificial intelligence, blockchain, and big data in reshaping international business. The rise of e-commerce, digital trade agreements, and cross-border fintech innovations. Cybersecurity threats and regulatory challenges in global digital trade. The impact of Industry 4.0 on global supply chains and international market strategies.

### **Unit 3: Sustainability, Ethics, and Corporate Social Responsibility**

Sustainability challenges in global business, including climate change, carbon footprint, and responsible supply chains. ESG (Environmental, Social, and Governance) factors in international business decision-making. Ethical dilemmas in cross-border operations, labor rights, corruption, and corporate governance. The role of international organizations in promoting sustainable business practices.

### **Unit 4: Contemporary Issues in Global Trade and Investment**

The changing dynamics of global trade agreements, foreign direct investment (FDI) trends, and regional trade blocs. Impact of pandemics and health crises on international business and global supply chains. The future of work and international labor market challenges, including remote work and cross-border talent management. Case studies on recent disruptions and strategic responses by multinational corporations.

### **Reference Books**

- Dunning, John H. & Lundan, Sarianna M. – Multinational Enterprises and the Global Economy (Edward Elgar Publishing)
- Cavusgil, S. Tamer, Knight, Gary, & Riesenberger, John R. – International Business: The New Realities (Pearson)

- Hill, Charles W. L. – International Business: Competing in the Global Marketplace (McGraw-Hill)
- Rugman, Alan & Collinson, Simon – International Business (Pearson)
- Morrison, Janet – The Global Business Environment: Towards Sustainability? (Macmillan)
- Ghemawat, Pankaj – World 3.0: Global Prosperity and How to Achieve It (Harvard Business Review Press)
- Wild, John J. & Wild, Kenneth L. – International Business: The Challenges of Globalization (Pearson)

## **Area-IT Management**

**Big Data Analytics(common for IT and Business Analytics specialization)**

**Credit-3**



**Course Objectives:**

1. To introduce the role of Big Data in decision-making and business strategy.
2. To explain the fundamentals of analytics and its classification.
3. To familiarize students with Big Data ecosystems, tools, and business applications.
4. To analyze real-world business use cases and emerging trends.

**Course Outcomes:**

1. Understand how Big Data is transforming industries and business functions.
2. Gain insights into analytics frameworks and their role in decision-making.
3. Learn about Big Data ecosystems without deep technical details.
4. Apply business-driven Big Data strategies through case studies.

**Unit 1: Introduction to Big Data and Business Analytics**

Evolution and Importance of Big Data in Business; Types of Business Analytics – Descriptive, Diagnostic, Predictive, and Prescriptive; Characteristics of Big Data – Volume, Velocity, Variety, Veracity, Value; Managerial Perspective on Data-Driven Decision Making; Big Data vs Traditional Data Analytics.

**Unit 2: Big Data Ecosystem and Managerial Applications**

Understanding the Big Data Stack – Data Sources, Storage, Processing, and Visualization; Business Applications of Analytics – Marketing, Finance, HR, Supply Chain, Customer Insights; Overview of Big Data Technologies; Data Management: SQL vs NoSQL; Big Data Platforms: Hadoop, Cloud Computing, AI-Driven Analytics; Case Studies: How Companies Use Big Data for Competitive Advantage.

**Unit 3: Big Data Strategy, Governance, and Ethical**

Challenges in Big Data Adoption for Businesses; Data Privacy, Security, and Compliance (GDPR, Data Protection Laws); Risk Management in Big Data Implementation; Ethical Concerns in AI & Big Data Decision-Making; Frameworks for Responsible Data-Driven Leadership.

**Unit 4: Big Data in Action: Industry Applications**

Industry-Specific Use Cases; Retail & E-Commerce – Customer Analytics, Personalization, Demand Forecasting; Financial Services – Fraud Detection, Credit Risk Analysis, Algorithmic Trading; Healthcare – Predictive Analytics, Patient Care Optimization, Drug Discovery; Logistics & Supply Chain – Route Optimization, Inventory Management; Future of Big Data: AI, Machine Learning, Cloud-Based Analytics; Emerging Trends: Real-time Decision Intelligence, Data Monetization, Smart Cities

**Text Books:**

- Schmarzo, B. (2016). Big Data MBA: Driving Business Strategies with Data Science. Wiley.
- Marr, B. (2016). Big Data in Practice: How 45 Successful Companies Used Big Data Analytics to Deliver Extraordinary Results. Wiley.
- Ohlhorst, F.J. (2013), Big Data Analytics: Turning Big Data into Big Money, Wiley and SAS Business Series

**Reference Books:**

- Minelli, M., Chambers, M., & Dhiraj, A. (2013). Big Data, Big Analytics: Emerging Business Intelligence and Analytic Trends for Today's Businesses. Wiley.

- Davenport, T. H. (2014). Big Data at Work: Dispelling the Myths, Uncovering the Opportunities. Harvard Business Review Press

## **Business Intelligence and Analytics**

**Credits – 3**

### **Course Objectives:**

1. To describe the importance of data driven decision making.
2. To explain tools and techniques of analytics.
3. To explain different types of analytics.

### **Course Outcomes:**

Upon successful completion of this course students will be able to:

1. Appreciate application of analytics in business context.
2. Apply methods for preparing data for model building.
3. Describe the approaches and methods of Business Analytics for decision making.
4. Apply analytics methods to organisational data.

### **Unit 1: Business Intelligence and Analytics for Decision Support**

Overview of Decision making process; Framework for data driven decision making, Decision support systems – components and classification, Overview of Business Intelligence and analytics

### **Unit 2: Preparing Data for mining and analytics applications**

Understanding properties and attributes of data, Operations on data, Understanding big data, Need for pre-processing of data, Data cleaning, handling missing data, Methods for identifying outliers, Data transformation- standardization, transformations to achieve normality, Dimension reduction using Principle Component analysis.

### **Unit 3: Descriptive Analytics**

Descriptive statistics for developing business insights, working with categorical variables, data visualization- types of charts and graphs, dashboards, proximity measures, clustering.

### **Unit 4: Predictive Analytics**

Linear and logistic regression-based analytics, Model diagnostics, nearest neighbourhood method for prediction, decision trees for prediction, Evaluating predictive performance

### **Suggestive Readings:**

- Shmueli, Bruce, Yahav, Patel, Lichtendahl Jr., Wali, O.P. (2021). Data Mining for Business Analytics, An Indian Adaptation: Concepts, Techniques, and Applications in R. Wiley
- Nwanganga, F., & Chapple, M. (2020). Practical Machine Learning in R (1st ed.). Wiley.
- Tan, P., Steinbach, M., Karpatne, A., & Kumar, V. (2018). Introduction to Data Mining (2nd Edition) (What's New in Computer Science) (2nd ed.). Pearson

- Dinesh Kumar, U.D. (2017) Business Analytics: The Science of Data-Driven Decision Making, Wiley
- Motwani, B. (2019) Data Analytics with R, Wiley

## **Information Technology and Business Process Reengineering**

**Credits - 3**

### **Course Objectives:**

1. To introduce the principles and practices of Business Process Reengineering (BPR) in the context of modern organizations.
2. To explore the transformative role of Information Technology (IT) in enabling successful BPR initiatives.
3. To analyse key strategies for managing organizational change and fostering innovation through BPR.
4. To integrate contemporary topics such as digital transformation, AI-driven process improvement, and sustainability into BPR discussions.

### **Course Outcomes:**

On successful completion of the course, students will be able to:

1. Understand the foundational principles and strategic importance of Business Process Reengineering.
2. Evaluate the role of emerging technologies such as AI, IoT, and data analytics in facilitating BPR.
3. Analyse and apply methodologies for process redesign and improvement in various industries.
4. Address the challenges of managing organizational change and aligning it with digital transformation goals.
5. Explore case studies and best practices to derive actionable insights for successful BPR implementations.

### **Unit 1: Introduction to Business Process Reengineering (BPR)**

Introduction to BPR and IT-Driven Transformation, Definition, Principles, and Evolution of Business Process Reengineering, The Strategic Importance of BPR in Modern Organizations, Role of Information Technology in BPR: Digital Transformation and Process Automation, Emerging Technologies in BPR: AI, IoT, Blockchain, and Cloud Computing, Case Studies: IT-Enabled Reengineering Success Stories

### **Unit 2: BPR Methodology and Implementation**

Methodology and Steps for Implementing BPR, Process Mapping and Workflow Redesign: Tools and Techniques, IT Tools for BPR: ERP Systems, Workflow Automation, and Process Analytics, Challenges and Risks in BPR Implementation, Trends in Process Reengineering: Agile and Lean Methodologies, Case Studies: Process Optimization in Digital Enterprises

### **Unit 3: Strategic and Cultural Aspects of BPR**

Linking BPR with Organizational Strategy and Business Goals, BPR and Total Quality Management (TQM), Building an Innovation Culture Through BPR, Managing Organizational Change: Leadership, Communication, and Employee Engagement, Sustainability and Green Process Reengineering, Case Studies: Cultural and Strategic Factors in BPR Success

#### **Unit 4: Future of BPR and Lessons from Case Studies**

Reinventing Enterprises with Digital Technologies, Measurement and Evaluation of BPR Success: KPIs and Metrics, People-Centric BPR: Empowering Teams and Overcoming Resistance to Change, Failures in BPR: Key Lessons and Best Practices, Contemporary Trends: Hyper automation, Industry 4.0, and Customer-Centric Reengineering, Case Studies: Comparative Analysis of Successful and Failed BPR Initiatives

#### **Reference Books:**

- Michael Hammer and James Champy - "Reengineering the Corporation: A Manifesto for Business Revolution", Harper Business.
- R. Radhakrishnan and S. Balasubramanian - "Business Process Reengineering: Text and Cases", PHI Learning, 2008.
- Vikram Sethi & William R. King - "Organizational Transformation Through Business Process Reengineering", Pearson Education, 2006.
- Thomas H. Davenport - "Process Innovation: Reengineering Work Through Information Technology", Harvard Business Review Press.
- Lon Roberts - "Process Reengineering: The Key to Achieving Breakthrough Success", Quality Press.
- Kiron D. Bondale - "Business Transformation: A Roadmap for Maximizing Business Value through IT". Eric Kimberling - "The Ultimate Guide to ERP Systems and Digital Transformation"

## **Data Mining for Business Analytics**

**Credits – 3**

#### **Course Objectives:**

1. To explain the ideas and concepts related to data mining.
2. To illustrate data mining techniques.
3. To illustrate applications of text mining techniques.

#### **Course Outcomes:**

Upon successful completion of the course the student will be able to:

1. Explain data mining process.
2. Apply appropriate classification methods on data.

3. Apply appropriate data mining techniques for extracting patterns.
4. Apply social network analytics and text mining.

### **Unit 1: Introduction to data mining and business analytics**

Overview of data mining; Core ideas in data mining for business analytics; steps in data mining; Supervised versus unsupervised methods, Overfitting, Variance Bias Trade off

### **Unit 2: Classification methods**

k-Nearest Neighbours (kNN); Naive Bayes Classifier; classification and regression trees; logistic regression; neural networks; discriminant analysis; concepts of bagging and bootstrapping, Random Forest model development.

### **Unit 3: Mining relationships among records**

Pattern mining methods; Association Rules; Hierarchical (Agglomerative) Clustering; Non-Hierarchical Clustering: The k-Means Algorithm;

### **Unit 4: Social network analytics and text mining**

Text mining process and applications, Overview of social networks; directed and undirected graphs; visualizing and analyzing networks.

### **Suggestive Readings:**

- Shmueli, Bruce, Yahav, Patel, Lichtendahl Jr., Wali, O.P. (2021). Data Mining for Business Analytics, An Indian Adaptation: Concepts, Techniques, and Applications in R. Wiley
- Nwanganga, F., & Chapple, M. (2020). Practical Machine Learning in R (1st ed.). Wiley.
- Tan, P., Steinbach, M., Karpatne, A., & Kumar, V. (2018). Introduction to Data Mining (2nd Edition) (What's New in Computer Science) (2nd ed.). Pearson
- Dinesh Kumar, U.D. (2017) Business Analytics: The Science of Data-Driven Decision Making, Wiley
- Motwani, B. (2019) Data Analytics with R, Wiley

## **Database Management System**

### **Credit-3**

#### **Course Objectives:**

1. To introduce database management concepts and their role in business decision-making.
2. To explain data organization, storage, and retrieval techniques relevant to managers.
3. To familiarize students with relational databases and structured query language (SQL).
4. To highlight data governance, security, and compliance in business environments.

#### **Course Outcomes:**

1. Understand the fundamentals of database management in business applications.

2. Analyze how businesses use databases for operations, reporting, and decision-making.
3. Gain familiarity with relational database concepts and SQL (without technical depth).
4. Identify best practices for data security, governance, and compliance.

### **Unit 1: Introduction to Database Management Systems**

Role of Databases in Business Decision-Making; Types of Databases: Relational, NoSQL, Cloud, Distributed Databases; Database vs Spreadsheet: Why Businesses Need DBMS; Fundamentals of Data Models: Hierarchical, Network, Relational, Object-Oriented ; Introduction to Relational Database Management System (RDBMS)

### **Unit 2: Database Design, SQL, and Business Intelligence**

Principles of Database Design: Normalization and Entity-Relationship (ER) Models; Basics of SQL for Business Users: Queries, Filtering, and Reporting; Database Functions for Business Operations (CRM, ERP, SCM); Business Intelligence (BI) and Data Warehousing; Case Studies: How Companies Use Databases for Decision Support

### **Unit 3: Data Security, Privacy, and Compliance**

Importance of Data Security in Business Environments; Data Privacy Laws and Compliance (GDPR, CCPA, IT Act); Database Threats: Hacking, Insider Threats, Data Breaches; Role of Access Control and Authentication in DBMS; Ethical Considerations in Database Management

### **Unit 4: Emerging Trends in Database Technologies**

Cloud Databases: AWS, Azure, Google Cloud – Business Applications; Big Data and NoSQL Databases (MongoDB, Cassandra); Artificial Intelligence and Automation in Database Management; Blockchain and Decentralized Databases; Future Trends: Data as a Strategic Asset for Business Growth

#### **Text Books:**

- Coronel, C., & Morris, S. (2016). Database Systems: Design, Implementation, & Management (12th Edition). Cengage Learning.
- Ramakrishnan R. and Gehrke J. (2014) Database Management Systems, McGrawHill.
- Connolly T. And Begg C. (2008) Database Systems: A Practical Approach to Design, Implementation and Management, 6/e, Pearson.

#### **Reference Books:**

- Sumathi S. & Esakkirajan S. (2007) Fundamentals of Relational Database Management Systems, Springer.
- Elmasri, R. & Navathe, S. B. (2015) Fundamentals of Database Systems, Pearson Education, Seventh Edition.

## **E-Business**

**Credits- 3**

**Course Objectives:**

1. To provide an understanding of the fundamental concepts, models, and strategies of e-business.
2. To equip students with knowledge of digital business models, e-commerce frameworks, and online marketing strategies.
3. To explore the role of emerging technologies, cybersecurity, and legal aspects in e-business operations.
4. To develop practical skills in managing and implementing e-business solutions for competitive advantage.

### **Course Outcomes:**

On successful completion of the course, students will be able to:

1. Understand the principles, technologies, and frameworks of e-business and e-commerce.
2. Analyse various e-business models and digital marketing strategies to enhance business growth.
3. Evaluate security, legal, and ethical issues associated with online business operations.
4. Apply e-business strategies to develop and manage online business platforms effectively.

### **Unit 1: Introduction to E-Business and Digital Business Models**

Overview of E-Business: Definition, Scope, and Evolution of E-Business, Traditional Business vs. E-Business: Key Differences, Advantages, and Challenges, E-Business Models: B2B, B2C, C2C, C2B, G2C, and Hybrid Models, E-Commerce Framework: Components, Online Business Transactions, E-Marketplaces, and E-Tailing, Technology Infrastructure for E-Business: Internet, Intranet, Extranet, Cloud Computing, and Mobile Commerce

### **Unit 2: E-Marketing and Digital Payment Systems**

Digital Marketing Strategies: SEO, SEM, Social Media Marketing, Email Marketing, and Affiliate Marketing, E-CRM and Customer Engagement: Personalization, Customer Analytics, and Retention Strategies, Online Advertising and Branding: Digital Ad Formats, Content Marketing, and Influencer Marketing, Payment Systems in E-Business: Online Payment Gateways, Digital Wallets, UPI, Cryptocurrencies, and Blockchain in E-Commerce

### **Unit 3: E-Business Security, Cyber Laws, and Legal Aspects**

Cybersecurity in E-Business: Security Threats, Encryption, Firewalls, and Secure Electronic Transactions (SET), Data Protection and Privacy: GDPR, IT Act, 2000, and Ethical Considerations in E-Business, Legal and Ethical Issues in E-Business: Intellectual Property Rights (IPR), Consumer Protection Laws, and Cyber Frauds, Risk Management in E-Business: Fraud Prevention, Trust Building, and Digital Compliance

### **Unit 4: Emerging Technologies and Future Trends in E-Business**

Artificial Intelligence (AI) and Machine Learning in E-Business: Chatbots, Personalization, and Predictive Analytics, Big Data and Business Intelligence: Role in Customer Insights, Market Trends, and Decision-Making, Internet of Things (IoT) and Smart Commerce: Applications in Supply Chain, Logistics, and Retail, Future of E-Business: Augmented Reality (AR), Virtual Reality (VR), Metaverse, and Sustainable E-Business Practices

### **Text Books:**

- Dave Chaffey, E-Business and E-Commerce Management (Pearson)

- Laudon & Traver, E-Commerce: Business, Technology, Society (Pearson)

#### **Reference Books:**

- Kenneth C. Laudon & Jane P. Laudon, Management Information Systems: Managing the Digital Firm (Pearson)
- Turban, King, Lee & Liang, Electronic Commerce: A Managerial Perspective (Pearson)
- Rayport & Jaworski, E-Commerce (McGraw Hill)
- Parag Kulkarni & Sunita Jahirabadkar, E-Business (Oxford University Press)

## **E-governance for Inclusive Development**

### **Credit-3**

#### **Course Objectives:**

1. To explain the key concepts related to e-governance
2. To explain transformative potential of digital India program
3. To explain issues related to the planning and implementation of e-governance projects.

#### **Course Outcomes:**

Upon successful completion of the course the student will be able to:

1. Identify the significance of e-governance Projects and related challenges.
2. Analyze the major e-governance initiatives for inclusive development.
3. Analyze strategic factors which influence e-governance performance.
4. Identify drivers and enablers of e-governance.

#### **Unit 1: Introduction to E-Governance**

Governance System in India, Allocation of Business, E-Governance in India, Evolution of E-governance in India, global scenario of e-governance, Digital India Programme, E-governance mission mode projects with particular reference to agriculture, Institutional framework, Initiatives for bridging digital divide for inclusive growth, Application of AI in e-governance.

#### **Unit 2: Measuring E-governance Performance**

Key stakeholders and value from e-governance, Assessment of E-governance, a strategic framework for improving E-governance performance.

#### **Unit 3: Driver of E-governance**

Concept of changing situation as a driver, significance of shared vision and mission, service accessibility, feedback loop, Key initiatives for inclusive development such as e-Panchayat, Direct Benefit Transfer, Common service centres, etc.

#### **Unit 4: Strategic Planning and Implementation– Enablers of E-governance**

Significance of environment analysis, Significance of collaboration in e-governance, refining structures and processes, Competence level of actors, involvement of senior leadership, Involvement of stakeholders, Effective e-governance through strategic alliances, select rural centric case studies.

#### **Suggested Readings:**

- Digital India Program available at <https://digitalindia.gov.in>



- Suri P.K. and Sushil (2017) Strategic Planning and Implementation of E-governance, Springer: Singapore.
- Heeks R. (2006) Implementing and Managing eGovernment, Vistaar Publications, New Delhi.
- Bhatnagar S. (2004) E-government – From Vision to Implementation: A Practical Guide to Implementation, Sage Publications, New Delhi.
- ARC (2008) ‘Promoting e-Governance: The SMART Way Forward’, Second Administrative Reforms Commission, Government of India, available at <http://arc.gov.in>.
- INDIA: E-Readiness Assessment Reports by Department of Electronics and Information Technology, Government of India ([mit.gov.in](http://mit.gov.in))
- UN E-Government Survey Reports available at [www.unpan.org](http://www.unpan.org)

## **Enterprise Resource Planning**

**Credits - 3**

### **Course Objectives:**

1. To provide an in-depth understanding of Enterprise Resource Planning (ERP) concepts, architecture, and implementation strategies.
2. To familiarize students with different ERP modules and their integration in business processes.
3. To analyse the role of ERP systems in improving operational efficiency, decision-making, and competitiveness.
4. To explore emerging trends and challenges in ERP implementation, including cloud-based ERP, AI, and IoT integration.

### **Course Outcomes:**

On successful completion of the course, students will be able to:

1. Understand the fundamental concepts, architecture, and implementation strategies of ERP systems.
2. Analyse various ERP modules and their role in business process integration.
3. Evaluate the challenges, risks, and best practices for successful ERP implementation.
4. Apply ERP solutions to optimize business processes and decision-making.

### **Unit 1: Introduction to ERP and Business Process Integration**

Overview of ERP: Definition, Evolution, and Benefits of ERP Systems, Enterprise Systems and Business Process Integration: Functional Areas of Business and Process Flow, ERP Architecture: Components, Layers, and ERP Life Cycle, ERP Vendors and Solutions: SAP, Oracle, Microsoft Dynamics, and Industry-Specific ERP Solutions

### **Unit 2: ERP Modules and Their Business Applications**

Finance and Accounting Module: General Ledger, Accounts Payable/Receivable, Financial Reporting, Human Resource Management (HRM) Module: Employee Records, Payroll, Talent Management, Supply Chain Management (SCM) Module: Procurement, Inventory Management, Logistics, and Distribution, Customer Relationship Management (CRM) Module: Customer Data Management, Sales, and Marketing Automation, Production Planning

and Manufacturing Module: Bill of Materials (BOM), Production Scheduling, and Quality Control, ERP in Small and Medium Enterprises (SMEs) vs. Large Enterprises

### **Unit 3: ERP Implementation, Integration, and Challenges**

ERP Implementation Process: Planning, Selection, Customization, Deployment, and Maintenance, Critical Success Factors for ERP Implementation: Change Management, User Training, and Stakeholder Involvement, Challenges in ERP Implementation: Cost Overruns, Resistance to Change, Data Migration Issues, Business Process Reengineering (BPR) and ERP Integration, ERP and Data Analytics: Role of Big Data and Business Intelligence in ERP Systems

### **Unit 4: Emerging Trends in ERP and Future Prospects**

Cloud-Based ERP: Benefits, Deployment Models, and Comparison with On-Premise ERP, AI and Machine Learning in ERP: Predictive Analytics, Intelligent Automation, and Smart Decision-Making, Internet of Things (IoT) and ERP: Real-Time Data Integration for Supply Chain and Manufacturing, Cybersecurity in ERP: Data Privacy, Risk Management, and Compliance, Future of ERP: Blockchain, Digital Transformation, and Industry-Specific ERP Innovations

#### **Text Books:**

- Alexis Leon, Enterprise Resource Planning (McGraw Hill)
- Mary Sumner, Enterprise Resource Planning (Pearson)

#### **Reference Books:**

- Monk & Wagner, Concepts in Enterprise Resource Planning (Cengage Learning)
- Vinod Kumar Garg & N.K. Venkatakrishnan, Enterprise Resource Planning: Concepts and Practices (PHI Learning)
- Sumner, Enterprise Resource Planning: Managing the Implementation Process (Pearson)
- Bret Wagner & Ellen Monk, Enterprise Resource Planning and Business Processes (Cengage)

## **Software Project Management**

**Credits – 3**

#### **Course Objectives:**

1. To explain the processes involved in software projects.
2. To illustrate the project management methodologies
3. To illustrate software effort estimation techniques.
4. To describe the techniques of software project quality enhancement.

#### **Course Outcomes:**

Upon successful completion of this course students will be able to:

1. Describe the software development life cycle.
2. Assess different types of contracts in software projects.
3. Apply software effort estimation techniques.

4. Demonstrate capability to plan, implement and monitor software projects.

### **Unit 1: Introduction to software project management**

Overview of Software Project Management; Software Development Life Cycles (SDLC); Project Management Frameworks; Project Initiation and Planning; Stakeholder Management.

### **Unit 2: Project Execution and Control**

Project Scheduling using Gantt charts, PERT charts, and Critical Path Method (CPM); Resource Management; Estimating project costs, budgeting, and controlling costs; Identifying, assessing, and mitigating project risks; Developing and implementing a communication plan.

### **Unit 3: Agile Project Management**

Principles, values, and methodologies of Agile; Scrum Framework; Principles and practices of Kanban; Agile Planning and Estimation; Agile Execution and Tracking: Daily stand-ups, sprint reviews, and retrospectives.

### **Unit 4: Advanced Topics and Project Closure**

Software Quality Management; Managing changes to project scope, schedule, and budget. Closing out projects, documenting lessons learned, and conducting post-project reviews; Managing Distributed Teams; Software Project Metrics and Measurement.

### **Suggested Readings:**

- Hughes, B., Cotterell, M., Mall, R. (2017). *Software Project Management, Special India Edition (6th ed.)*. MC GRAW HILL INDIA
- Murray, A. P. (2016). *The Complete Software Project Manager: Mastering Technology from Planning to Launch and Beyond*. Wiley.
- Dutt, C. A. S. (2015). *Software Project Management*. Pearson India.
- PMI. (2021). *A Guide to the Project Management Body of Knowledge (PMBOK Guide) (7th ed.)*. Project Management Institute.

## **Business Systems Analysis and Design**

**Credits – 3**

### **Course Objectives:**

1. To provide students with a comprehensive understanding of business systems analysis and design concepts.
2. To equip students with the skills to elicit requirements, model systems, and design effective solutions.
3. To enable students to evaluate and select appropriate system designs.
4. To prepare students to manage the implementation and ongoing support of business systems.

### **Course Outcomes:**

Upon successful completion of the course the student will be able to:

1. Identify issues related to planning, implementation and maintenance of IT based Systems.
2. Describe and evaluate the systems development life cycle.

3. Assess the requirements for system design by data and process modelling.
4. Apply tools and techniques for designing information systems for businesses

### **Unit 1: Introduction to business system analysis**

Overview of systems analysis; systems development life cycle; project identification and initiation; system request; Feasibility analysis; project selection; project plan; project methodology; staffing and coordinating project activities; Requirements analysis; Stakeholder analysis; Feasibility Study

### **Unit 2: Process and data modelling**

Overview of process modelling; data flow diagrams; Entity relationship diagram – creation and validation; data dictionary and metadata; design guidelines; normalization; Balancing Entity Relationship Diagrams with Data Flow Diagrams.

### **Unit 3: Systems Design**

Overview of systems design; Transition from requirements to design; Architecture design; User interface design; Physical data flow diagrams; Designing programs, structure chart; Design guidelines; program specification; Data storage design; Physical entity relationship diagram; CRUD matrix; optimizing data storage.

### **Unit 4: Implementation phase**

Managing programming processes and tasks; managing schedule; Test Planning; Developing user documentation; Managing transition to the new system; Migration Plan; selecting conversion strategy; Enabling adoption of new system; Post implementation activities

### **Reference books and Suggested Readings:**

- Dennis, A., Wixom, B., & Roth, R. M. (2021). Systems Analysis and Design (8th ed.). Wiley.
- Kendell, K.E., Kendell, J.E. (2023). Systems Analysis and Design (11<sup>th</sup> ed.). Pearson.
- Tilley, S., Rosenblatt, H.J. (2017). Systems Analysis and Design (11<sup>th</sup> ed.). Cengage.

## **Contemporary Issues in Information Technology Management**

**Credits – 3**

### **Course Objectives:**

1. To provide students with a comprehensive understanding of current trends and issues in IT management.
2. To equip students with the skills to develop and implement effective IT strategies and governance frameworks.
3. To enable students to manage IT risks, ensure cybersecurity, and protect data privacy.
4. To foster students' leadership skills and prepare them to manage IT functions in a changing business environment.

### **Course Outcomes:**

Upon successful completion of this course students will be able to:

1. Analyze and evaluate contemporary IT management challenges and opportunities.

2. Develop and implement IT strategies that align with business goals and drive digital transformation.
3. Manage IT risks, ensure cybersecurity, and protect data privacy.
4. Lead and manage IT functions effectively in a dynamic and evolving digital landscape.

### **Unit 1: IT Strategy and Alignment**

Strategic Role of IT; IT-Business Alignment; IT Governance; Strategic IT Planning; Business value of IT investments: Contemporary case studies, journal articles, industry reports, and other relevant publications.

### **Unit 2: Digital Transformation and Innovation**

Digital Transformation; Digital Business Models; IT Innovation: Software development and delivery; Data-Driven Decision Making: Contemporary case studies, journal articles, industry reports, and other relevant publications.

### **Unit 3: IT Risk and Security Management**

Cybersecurity Threats and Vulnerabilities; Cybersecurity Management; Data Privacy and Protection; IT Risk Management; Business Continuity and Disaster Recovery: Contemporary case studies, journal articles, industry reports, and other relevant publications.

### **Unit 4: IT Leadership and Change**

IT Leadership; Change Management; Organizational Culture and IT; Talent Management in IT; Ethical and Social Implications of IT: Contemporary case studies, journal articles, industry reports, and other relevant publications.

### **Reference Books and Suggested Readings:**

- Laudon, K. C., & Laudon, J. P. (2023). Management information systems: Managing the digital firm. Pearson.
- Turban, E., Pollard, C., & Wood, G. (2023). Information technology for management: Driving digital transformation to increase local and global performance, growth, and sustainability (13th ed.). Wiley
- Case studies of publishers including Harvard Business Publishing.
- Journals including Decision Support Systems, and Journal of Management Information Systems.
- Industry reports from research and consultancy institutions including Gartner, and Forrester.

# **Area: Entrepreneurship**

## **Identifying and Evaluating Business Opportunities**

**Credits- 3**

### **Course Objective:**

To equip students with the knowledge and analytical skills to identify, evaluate, and develop viable business opportunities through market analysis, feasibility assessment, and innovative business modeling.

### **Course Outcomes:**

Upon successful completion of the course the student should be able to:

1. Identify business opportunities based on market trends, customer needs, and industry dynamics.
2. Evaluate feasibility and risks through technical, financial, and operational analysis.
3. Develop and validate business models using value proposition and market testing techniques.
4. Create actionable business plans with strategic insights for entrepreneurial success.

### **Unit 1: Introduction to Business Opportunities**

Understanding business opportunities: meaning, importance, and sources. Difference between ideas and opportunities. Methods for identifying potential opportunities—market trends, customer needs, technological advancements, and regulatory changes. Entrepreneurial mindset and opportunity recognition. Tools for scanning the business environment.

### **Unit 2: Opportunity Assessment and Feasibility Analysis**

Frameworks for evaluating business opportunities: market potential, industry analysis, and competitive landscape. Feasibility analysis—technical, financial, and operational feasibility. Risk assessment and mitigation strategies. Legal and regulatory considerations in evaluating opportunities. Case studies of successful opportunity evaluation.

### **Unit 3: Business Model Development and Validation**

Concept and components of a business model. Designing a value proposition and revenue model. Market validation techniques—customer interviews, surveys, and prototyping. Minimum Viable Product (MVP) approach for testing business opportunities. Lean startup methodology and pivoting strategies.

### **Unit 4: From Opportunity to Business Plan**

Developing a business plan based on identified opportunities. Key elements—executive summary, market analysis, value proposition, operations, and financial projections. Pitching an opportunity to investors and stakeholders. Role of networking and mentorship in business opportunity development. Real-world case studies of businesses that capitalized on emerging opportunities.

### **Text Books:**

- Barringer, B. R., & Ireland, R. D. – *Entrepreneurship: Successfully Launching New Ventures* (Pearson)
- Osterwalder, A., & Pigneur, Y. – *Business Model Generation* (Wiley)
- Ries, E. – *The Lean Startup* (Crown Business)
- Christensen, C. M., & Raynor, M. E. – *The Innovator's Solution: Creating and Sustaining Successful Growth* (Harvard Business Review Press)
- Stevenson, H., Roberts, M. J., & Grousbeck, H. I. – *New Business Ventures and the Entrepreneur* (McGraw-Hill)

## **Design Thinking and Product Development**

**Credits – 3**

### **Course Objective:**

The objective of the course is to expose students to the design process as a tool for innovation. It aims at enabling students to use creativity, design thinking, and the design process to bring new ideas, products, and value to companies, communities, and people.

### **Course Outcomes:**

Upon successful completion of the course the student should be able to:

1. Explain the concept of design thinking for product/ service development
2. Apply design thinking tools and techniques
3. Learn to think and ideate with constraints
4. Outline stages of product development
5. Strategise plans to create demand for products/services and build markets

**Unit 1: Introduction to Design Thinking:** Meaning, Design thinking skills and mindset, Principles of design thinking, General approaches to design thinking, Process of design thinking, Lean Vs. Agile Vs. Design Thinking, Constituents of design thinking team, Design thinking workshops and meetings- characteristics and types, Application of design thinking frameworks, Pitfalls and cautions in design thinking workgroups.

**Unit 2: Techniques for Sparking Ideas and Problem Solving:** Defining problems and making decisions, Brainstorming and analysing options, using teams to think critically and problem solve, evaluating alternatives, Strategic planning and scenario planning, Avoiding fallacies.

**Unit 3: Design Thinking Techniques and Practices:** Listening and empathizing techniques, Define and ideation techniques, Prototype and test techniques, Visualization techniques and diagrams, Story-telling techniques. Design Thinking in Various Sectors- Health, Finance, Education, Infrastructure, Retail, Banking.

**Unit 4: Product Development:** Product specifications, Product architecture, Product development process, managing product development, new product business plans, building markets and creating demand for new products.

### **Suggested Readings:**

- Brown, T. (2009). *Change by Design: How Design Thinking Transforms Organizations and Inspires Innovation*. HarperBusiness

- Martin, R. (2009). The Design of Business- Why Design Thinking is the Next Competitive Advantage. Harvard Business Press
- Langenfeld, K. (2019). Design Thinking for Beginners: Innovation as a factor for entrepreneurial success. Personal Growth Hackers
- Devyani M. Lal (2021). Design Thinking: Beyond the Sticky Notes. Sage Publications.

## **Financing the Entrepreneurial Business**

### **Credits – 3**

#### **Course objective:**

This course has been developed to provide students with an understanding of the financial aspects of starting, funding, operating, and exiting an entrepreneurial venture.

#### **Course outcomes:**

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

1. Understand the relation between entrepreneurial finance and value creation in a business.
2. Analyse the sources of finance for new ventures.
3. Judge the financial performance of an entrepreneurial initiative.
4. Assess the valuation of an enterprise.

#### **Unit 1: Introduction**

Introduction: New Venture Financing – Types of entrepreneurship, stages of new venture development, business plans, sources of financing, information issues, term sheets. Methods of Financial Forecasting: Forecasting for new companies, fundamental analysis, incorporating uncertainty. Sources of finance - Financing alternatives, considerations, financial decision process, cumulative financing needs, organizational structure, reputation & relationships, financial distress.

#### **Unit 2: Cash Flow Modeling & Investment Assessment**

Financial modeling for start-ups, incorporating uncertainty. Assessing Financial Needs – Sustainable growth, Break-even analysis, planning for rapid growth, scenario analysis, staged investing

#### **Unit 3: Valuation**

New Venture Valuation – Myths, discounted cash flow, RADR, CEQ, relative value, venture capital method, rates of return Valuation in Practice – Continuing value, multiples, estimating risk free, market risk premium & beta, applying RADR & CEQ, advantages & disadvantages of RADR & CEQ. The Entrepreneur's Perspective on Value – Undiversified investors, partial-commitments, valuing partial commitment with RADR & CEQ.

#### **Unit 4: Real Options, Deal Structure and Contract Design**

Real options: New Venture Strategy - Strategic planning, financial strategy, real vs. financial options, expansion & abandonment options, decision trees, game trees, game theory. Deal Structure: Deal Structure – Outside investors, contracts, proportional risk sharing, asymmetric risk & return, subsidized investors, active investors, implementation & negotiation, informational issues. Contract Design: Value Creation & Contract Design - Staged investing, signaling beliefs, alignment of interests, valuation-based contracting. Legal entities



**Text Books:**

- Burns, P. (2001). Entrepreneurship and small business. New Jersey:Palgrave.
- Entrepreneurial Finance, 2011, Janet Smith, Richard Smith, & Richard Bliss, Stanford University Press.

**Reference Books:**

- Hisrich, R., & Peters, M. (2006). Entrepreneurship. New Delhi: TataMcGraw Hill.
- Holt, D. H. (2004). Entrepreneurship new venture creation. New Delhi:Prentice Hall of India.
- Kaplan, J. (2004). Patterns of entrepreneurship. Wiley.
- Mullins, J. W. (2006). New business road test. New Delhi: Prentice Hall.

## **Entrepreneurial Marketing**

**Credits – 3****Course Objective:**

The objective of the course is to provide an in-depth understanding of marketing theory, concepts and tools used to market a new product offering and/or applicable in an entrepreneurial setting.

**Course Outcomes:**

Upon successful completion of the course the student should be able to:

1. Demonstrate knowledge and understanding of the relationship between the concepts of marketing and entrepreneurship.
2. Design marketing tactics appropriate to the limited resources of a new venture.
3. Build an innovative marketing strategy for a new venture.
4. Understand contemporary issues in Entrepreneurial marketing.

**Unit 1: Introduction to Entrepreneurial Marketing:** Meaning, Characteristics, Functions, Marketing Challenges, Marketing Mix (6Ps), Entrepreneurial marketing plan, Identifying entrepreneurial marketing opportunities, market research, demand forecasting, Market Development.

**Unit 2: Marketing Strategy for Early-Stage Ventures:** The Journey of Customer Discovery, Product Segmentation, Targeting, Positioning in new venture, Developing go-to-market strategy, Digital Marketing for Entrepreneurs: Paid Search & Social Media Marketing, No-Money Marketing techniques, Customer Discovery: Growth Hacking & App Marketing, Guerrilla marketing, Buzz marketing, viral marketing in emerging businesses. Building Customer Relationships- Customer delight, Customer retention strategies & developing customer loyalty programs. Role of Integrated Marketing Communication in New ventures.

**Unit 3: Entrepreneurial Pricing and Distribution Strategy:** Pricing in new ventures- Price determination of new innovative products-cost and value-based pricing, behavioral pricing. Application of pricing strategies like bundle, segment, product line, menu pricing and measuring the consumer's willingness to pay. Distribution Channels for new ventures - Understanding Channels, Channel Options- Owned, Earned, Paid, Channel Drivers, Choosing

a Channel Strategy, Three Channel Design imperatives, Formalized Channel Arrangement, Supply Chain Management.

**Unit 4: Entrepreneurial Growth and Market Development Strategies:** Growth Strategies – concept and forms, Internal, External and Co-operative growth strategies. Growth models – Life-cycle and Phase model, integrated lifecycle model (evolutionary), Greiners growth model (revolutionary), and Complexity management (process) model. Market Development Strategies- New Offerings, New Geographies, Growing the Team.

**Suggested Readings:**

- Godstein, B. (2020). Entrepreneurial Marketing-A Blueprint for Customer Engagement. Sage Publications.
- Chaston, I. (2015). Entrepreneurial Marketing: Sustaining Growth in All Organisations. Palgrave macmillan
- Nijssen, E. (2014). Entrepreneurial Marketing: An Effectual Approach. Routledge

## **Entrepreneurship and E-business**

**Credits – 3**

**Course Objective:**

The objective of the course is to enable students to become familiar with the mechanism for conducting business through electronic means.

**Course Outcomes:**

Upon successful completion of the course the student should be able to:

1. Understand the concept of E-business and its various aspects.
2. Envision innovative business models.
3. Identify the synergy of technology and new age businesses.
4. Assess the business scenario and design business models.

**Unit 1: Introduction to E-business:**

Overview of E-business, Origin and need of E-business, Factors affecting E-business, E business framework, Models of E-business: B2B, B2C, C2C, C2B, B2B2C; Major requirements in E-business, Functional elements of E-business, Emerging trends and technologies in E-business, E-market and its types, E-government services, Management challenges and opportunities, Impact of E-commerce on business, E-Business Models.

**Unit 2: Payment Gateways Management:**

Electronic payment system, electronic cheque truncation system, electronic cash, smart cards, risk and electronic payment system, unified payment interface, mobile wallets; Application and management; Role of National Payments Corporation of India, RBI protection for unauthorized debits, precautions for cyber safe transactions.

**Unit 3: Security and Legal Aspects of Internet-Enabled Business:**

Threats in E-Commerce, Security of Clients and Service-Provider; Cyber Laws – Cyber-crimes as provided under Information Technology Act 2000, secure electronic records and digital signatures, offences, penalties and adjudication.

#### **Unit 4: Launching Your E business:**

Marketing an E-Business, Search Engines and Directories, CRM in E-commerce, Building a Corporate Website: Practical issues on servers and Application Software, Corporate Web Site Management issues, E- commerce and WTO.

#### **Text Books:**

sChaffey, D. (2011). E-Business and E-Commerce Management: Strategy, Implementation and Practice. Pearson Education India.

- Ian, Dodson I. (2016). The Art of Digital Marketing: The Definitive Guide to Creating Strategic, Targeted, and Measurable Online Campaigns. Wiley.
- Kotler, P. Kartajaya, H & Setiawan, I. (2017). Marketing 4.0: Moving from Traditional to Digital. Wiley.
- Marilyn, Greenstein, M. & Feinman, T. (2000). Electronic Commerce: Security Risk Management and Control. McGraw-Hill Inc.

## **Creativity and Innovation**

**Credits – 3**

#### **Course Objectives:**

1. Learn the concepts of Creativity and Innovation
2. To know the tools and techniques of creativity
3. To know the methods to take Innovation to market
4. To know the ways to protect intellectual assets

#### **Course Outcomes:**

1. Appreciate the imperative of innovation within society to dispel common misconceptions regarding innovation and creativity;
2. Critically analyse theories of innovation and creativity;
3. Use evidence to critically challenge innovation practices and communicate recommended behavioural changes;
4. Identify possible changes in established environments and routines to challenge the status quo.

**Unit 1: Fundamentals of Creativity and Innovation** covers the meaning, components, and types of creativity, highlighting its advantages and debunking common myths. It explores the creativity process through the stages of preparation, incubation, illumination, and evaluation. Additionally, it distinguishes between creativity and innovation, outlining the innovation process from idea generation and screening to experimentation, commercialization, diffusion, and implementation. Various types of innovation, including radical, incremental, product, service, and process innovation, are also discussed.

**Unit 2: Tools and Techniques for Creativity & Innovation** focuses on creative thinking attributes such as thinking out of the box, risk-taking, curiosity, and passion. It introduces

essential tools and techniques like brainstorming, negative brainstorming, and mind mapping while examining the enablers and impediments to creativity.

**Unit 3: Entrepreneurial Creativity and Market Applications** delves into entrepreneurial creativity, emphasizing the impact of time pressure and factors such as expertise, creative thinking skills, and motivation. It outlines steps to enhance entrepreneurial creativity and explores the transition from innovation to market through concepts like the Idea Funnel and Stage-Gate Process. This unit also introduces innovation platforms, discussing their meaning, need, functions, phases, types, benefits, and constraints.

**Unit 4: Asset Protection and Intellectual Property Rights** addresses the importance of protecting creative and innovative ideas through intellectual property rights. It covers patents, copyrights, trademarks, trade secrets, and traditional knowledge, ensuring students understand their significance in the business and entrepreneurial landscape.

#### **Text Books**

- S. S. Khanka, Creativity and Innovation in Entrepreneurship, 2021
- Christina E. Shalley, Michael A. Hitt, Jing Zhou : The Oxford Handbook of Creativity, Innovation, and Entrepreneurship, 2015

## **Family Business Management**

**Credits – 3**

#### **Course Objectives:**

The students will try to learn:

1. The family business system in India.
2. Challenges and governance of family business in India.
3. The qualities to be possessed by the successor of the organization and concentrating on the improvement of those qualities.
4. Business cycle stages and their influence on family business and tuning business according to the changing environment.

#### **Course Outcomes:**

After successful completion of the course, students will be able to:

1. Outline the basic concepts relating to the family business in India to get exposure to it.
2. Contrast the challenges and competitive advantages for the family business in India to transform challenges into competitive advantages.
3. List out responsibilities and duties and challenges of owners for a family business organization in India to overcome challenges.
4. Demonstrate various factors affecting family governance in India for effective maintenance of business

#### **Unit 1: Fundamentals of Family Business**

Family business as a unique synthesis, the three-generation rule, succession, and continuity. Building lasting family businesses through systems theory, agency theory, and the stewardship perspective. Competitive challenges and advantages of family businesses, understanding family dynamics through genograms and family messages. Exploring family emotional intelligence and the ECI-U Model.

### **Unit 2: Ownership Challenges and Governance**

Balancing shareholder priorities between managers and owners, responsibilities of shareholders, and effective governance of the shareholder-firm relationship. Family governance structures, challenges, and managing succession. Enterprise sustainability through the twelve elements of strategic fit and their implications for family businesses.

### **Unit 3: Successor Development and Leadership**

Key characteristics of next-generation leaders, attributes, and abilities for responsible leadership. Managing interdependence and the CEO's role in succession planning. Understanding different types of CEO spouses and the transfer of power within family businesses.

### **Unit 4: Strategy and Future of Family Business**

Strategic planning in family businesses across life cycle stages, leveraging core competencies for competitive advantage, and strategic regeneration through the Business Rejuvenation Matrix. Fostering intrapreneurship and transgenerational entrepreneurship. Navigating organizational evolution, cultural change, commitment planning, and institutionalizing change to sustain family businesses in a competitive landscape.

#### **Text Books:**

- Josh Baron, Rob Lachenauer, "Harvard Business Review Family Business Handbook", Harvard Business Review Press, Jan, 2021.
- Thomas Zellweger, "Managing the family business", Edward Elgar Publishing Ltd, April, 2017.
- Ernesto J. Poza, Mary S. Daughterty, Family Business, Cengage Learning, 3rd Edition, 2015.

#### **Reference Books:**

- John L. Ward, Keeping the Family Business Healthy: How to Plan for Continuing Growth, Profitability and Family Leadership, Palgrave Macmillan, 3rd Edition, 2011.
- M. Nordqvist, T. Zellweger, Trans-generational Entrepreneurship: Exploring Growth and Performance in Family Firms Across Generations, Edward and Elgar Publishing Limited, 4th edition, 2010.

## **Social Entrepreneurship**

### **Credits – 3**

#### **Course Objectives:**

Upon completion of this course, students will be able to:

1. Define social entrepreneurship and distinguish its elements across a continuum of organizational structures from traditional nonprofits to social enterprises to traditional for profits.
2. Classify the key elements of, and actors in, the social entrepreneurship ecosystem.
3. Engage with a diverse group of social entrepreneurs.
4. Assess the strengths and limitations of social entrepreneurship in addressing social problems in the urban context.

#### **Course Outcome:**

On successful completion of this course, students will be able to:

1. Explain the characteristics that define social entrepreneurship.
2. Describe different forms of social enterprise organizations.
3. Apply and critique social entrepreneurship frameworks.
4. Explain key considerations in resourcing social entrepreneurship.

### **Unit 1: Introduction to Entrepreneurship**

Meaning and definition of entrepreneur and entrepreneurship. Types of entrepreneurs (social, serial, lifestyle) and types of entrepreneurships (creative, inclusive, knowledge). Key entrepreneurial characteristics: innovation, creativity, risk-taking, and opportunity creation. Scope of entrepreneurship development in India and the concept of value creation.

### **Unit 2: Social Entrepreneurship and Social Enterprises**

Meaning and definition of social entrepreneur, social entrepreneurship, and social enterprises. Characteristics of social entrepreneurship, key traits of social entrepreneurs, and differences between business and social entrepreneurship. The role of social entrepreneurship in India and developing countries.

### **Unit 3: Social Entrepreneurship Process and Models**

Key models of the social entrepreneurship process: Timmons Model, PCDO Framework, Case Model, and Social Entrepreneurship Framework. Sources of social entrepreneurship (public, private, and voluntary sectors). Essential qualities and skills of a social entrepreneur, including leadership, innovation, vision, and accountability.

### **Unit 4: Ethical Entrepreneurship and Challenges**

Meaning and principles of ethical entrepreneurship, including empirical and eternal ethics. Entrepreneurial responsibilities toward customers, employees, and government. Challenges in social entrepreneurship and real-world case studies (BRAC, Grameen Bank, SEWA). Boundaries of social entrepreneurship, including social service provision and social activism.

### **References Books:**

- Robert A. Philips Margret Bonefiel Ritesh Sharma, Social entrepreneurship, the next big business opportunity Global Vision Publishing House, New Delhi, 2011
- S.S.Khanka, Entrepreneurship in India, perspective and practice, Akansha publishing house, New Delhi, 2009
- Jill Kickul and Thomas S.Lyons, Routledge, Understanding social entrepreneurship, the relentless pursuit of mission in an ever changing world, New York, 2012
- Vasanth Desai, Entrepreneurial development, Himalaya Publishing House, 2008, web resources.

## **Contemporary Issues in Entrepreneurship Management**

**Credits- 3**

### **Course Objectives:**

1. Analyze emerging trends and contemporary challenges in entrepreneurship.

2. Understand the impact of innovation, globalization, and digital transformation on startups.
3. Examine the role of finance, marketing, and leadership in entrepreneurial success.
4. Explore ethical, social, and sustainable entrepreneurship practices.

### **Course Outcomes:**

Upon completion, students will be able to:

1. Evaluate and apply modern entrepreneurial frameworks such as lean start-up and design thinking.
2. Assess growth strategies and international entrepreneurship trends.
3. Utilize innovative tools and finance mechanisms for business success.
4. Develop strategies for sustainable and responsible entrepreneurship

### **Unit 1: Contemporary Entrepreneurship Issues**

Lean start-up methodologies; Design thinking for entrepreneurship; The entrepreneurship process and firm growth; Market and entrepreneurship leadership; Entrepreneurship effectuation; Commercialization strategies; International entrepreneurship and global expansion.

### **Unit 2: Venture Development & Finance**

Venture finance: sources, crowdfunding, angel investors, and venture capital; Corporate venturing and intrapreneurship; Financial planning for startups; Risk assessment in entrepreneurial ventures; Growth strategies and scaling businesses; Entrepreneurship in developing economies.

### **Unit 3: Contemporary Innovation Issues**

Innovation management and its process; Open innovation and collaboration; Business, technology, and process innovation; New product development (NPD); Innovation tools and methodologies; Innovation clusters, networks, and ecosystems; Innovation accounting and finance.

### **Unit 4: Social Entrepreneurship & Sustainable Business Models**

Social entrepreneurship: impact-driven business models; Sustainable business practices and circular economy; Ethical decision-making and responsible leadership; The role of entrepreneurship in solving global challenges; Case studies on successful social enterprises

### **Text Book:**

- Baroda, S., Ahlawat, P. K., Nandal, S., & Kumar, N. Contemporary Issues in Innovations, Entrepreneurship and Business Management.

### **Reference Books:**

- Ries, E. The Lean Startup.
- Osterwalder, A., & Pigneur, Y. Business Model Generation.
- Blank, S. The Startup Owner's Manual.
- Schilling, M. Strategic Management of Technological Innovation.
- Aulet, B. Disciplined Entrepreneurship: 24 Steps to a Successful Startup.





## **Area- Business Analytics**

### **Big Data Analytics (common for IT and Business Analytics specialization)**

**Credit-3**

#### **Course Objectives:**

1. To introduce the role of Big Data in decision-making and business strategy.
2. To explain the fundamentals of analytics and its classification.
3. To familiarize students with Big Data ecosystems, tools, and business applications.
4. To analyze real-world business use cases and emerging trends.

#### **Course Outcomes:**

1. Understand how Big Data is transforming industries and business functions.
2. Gain insights into analytics frameworks and their role in decision-making.
3. Learn about Big Data ecosystems without deep technical details.
4. Apply business-driven Big Data strategies through case studies.

#### **Unit 1: Introduction to Big Data and Business Analytics**

Evolution and Importance of Big Data in Business; Types of Business Analytics – Descriptive, Diagnostic, Predictive, and Prescriptive; Characteristics of Big Data – Volume, Velocity, Variety, Veracity, Value; Managerial Perspective on Data-Driven Decision Making; Big Data vs Traditional Data Analytics.

#### **Unit 2: Big Data Ecosystem and Managerial Applications**

Understanding the Big Data Stack – Data Sources, Storage, Processing, and Visualization; Business Applications of Analytics – Marketing, Finance, HR, Supply Chain, Customer Insights; Overview of Big Data Technologies; Data Management: SQL vs NoSQL; Big Data Platforms: Hadoop, Cloud Computing, AI-Driven Analytics; Case Studies: How Companies Use Big Data for Competitive Advantage.

#### **Unit 3: Big Data Strategy, Governance, and Ethical**

Challenges in Big Data Adoption for Businesses; Data Privacy, Security, and Compliance (GDPR, Data Protection Laws); Risk Management in Big Data Implementation; Ethical Concerns in AI & Big Data Decision-Making; Frameworks for Responsible Data-Driven Leadership.

#### **Unit 4: Big Data in Action: Industry Applications**

Industry-Specific Use Cases; Retail & E Commerce – Customer Analytics, Personalization, Demand Forecasting; Financial Services – Fraud Detection, Credit Risk Analysis, Algorithmic Trading; Healthcare – Predictive Analytics, Patient Care Optimization, Drug Discovery; Logistics & Supply Chain – Route Optimization, Inventory Management; Future of Big Data: AI, Machine Learning, Cloud-Based Analytics; Emerging Trends: Real-time Decision Intelligence, Data Monetization, Smart Cities

#### **Text Books:**

- Schmarzo, B. (2016). Big Data MBA: Driving Business Strategies with Data Science. Wiley.
- Marr, B. (2016). Big Data in Practice: How 45 Successful Companies Used Big Data Analytics to Deliver Extraordinary Results. Wiley.
- Ohlhorst, F.J. (2013), Big Data Analytics: Turning Big Data into Big Money, Wiley and SAS Business Series

#### **Reference Books:**

- Minelli, M., Chambers, M., & Dhiraj, A. (2013). Big Data, Big Analytics: Emerging Business Intelligence and Analytic Trends for Today's Businesses. Wiley.
- Davenport, T. H. (2014). Big Data at Work: Dispelling the Myths, Uncovering the Opportunities. Harvard Business Review Press.

## **Python Programming for Data Analytics**

### **Credits- 3**

#### **Course Objectives:**

1. Introduce Python programming fundamentals relevant to business analytics;
2. Equip students with skills to analyze and visualize business data using Python;
3. Demonstrate the application of Python in solving real-world business problems;
4. Foster an understanding of data-driven decision-making processes.

#### **Course Outcomes:**

1. Write Python scripts to handle and analyze business data;
2. Utilize Python libraries for data manipulation and visualization;
3. Apply Python-based analytics to support business strategies;
4. Interpret and present data insights effectively to stakeholders.

### **Unit 1: Introduction to Python Programming**

Overview of Python and its relevance in business analytics; Setting up the Python environment: Installation and basic setup; Python syntax basics: Variables, data types, and operators; Control structures: Conditional statements and loops; Functions and modules: Creating reusable code blocks.

### **Unit 2: Data Handling and Analysis with Python**

Introduction to data structures: Lists, tuples, dictionaries, and sets; File operations: Reading from and writing to files; Utilizing libraries for data analysis: NumPy for numerical data processing, Pandas for data manipulation and analysis; Data cleaning: Handling missing values and data inconsistencies; Exploratory data analysis: Descriptive statistics and data summarization.

### **Unit 3: Data Visualization and Interpretation**

Importance of data visualization in business contexts; Introduction to Matplotlib and Seaborn libraries; Creating various types of plots: Line, bar, histogram, and scatter plots; Customizing plots: Titles, labels, legends, and colors; Interpreting visual data to derive business insights.

### **Unit 4: Applied Business Analytics with Python**

Case studies: Real-world applications of Python in business analytics; Time series analysis: Forecasting and trend analysis; Introduction to machine learning concepts: Supervised vs. unsupervised learning, implementing simple predictive models using Python; Ethical considerations in data analytics; Best practices for presenting data findings to non-technical audiences.

**Text Books:**

- McKinney, W. (2017). Python for Data Analysis: Data Wrangling with Pandas, NumPy, and IPython (2nd ed.). O'Reilly Media.
- VanderPlas, J. (2016). Python Data Science Handbook: Essential Tools for Working with Data. O'Reilly Media.

**References Books:**

- Grus, J. (2015). Data Science from Scratch: First Principles with Python. O'Reilly Media.
- Müller, A. C., & Guido, S. (2016). Introduction to Machine Learning with Python: A Guide for Data Scientists. O'Reilly Media.

## **R Programming for Data Analytics**

**Credits –3**

**Course Objectives:**

1. To provide students with a strong foundation in R programming.
2. To enable students to perform data analysis and visualization using R.
3. To equip students with the skills to apply statistical techniques to real-world problems.
4. To introduce students to basic machine learning concepts and algorithms.

**Course Outcomes:**

Upon successful completion of this course students will be able to:

1. Write R code for data manipulation, cleaning, and preprocessing.
2. Create insightful visualizations using ggplot2 and other libraries.
3. Apply statistical methods for data analysis and hypothesis testing.
4. Build predictive models using basic machine learning algorithms in R.

**Unit 1: Foundations of R programming**

Introduction to R and RStudio; Data Types and Structures (Vectors, Matrices, Arrays, Lists, Data Frames); Control Flow (Conditional Statements, Loops); Functions in R; Working with Files (Reading and Writing Data); Introduction to Packages and Libraries (dplyr, tidyr, ggplot2).

**Unit 2: Data Wrangling and Manipulation**

Data Cleaning and Transformation (Handling Missing Values, Outliers); Data Tidying and Reshaping (Using dplyr and tidyr); Data Aggregation and Summarization; Working with Dates and Times.

**Unit 3: Data Visualization**

Creating Basic Plots (Scatter Plots, Bar Charts, Histograms); Customizing Plots (Aesthetics, Layers, Themes); Creating Complex Plots (Facets, Geoms); Interactive Graphics with Shiny.

#### **Unit 4: Statistical Modeling and Machine Learning**

Introduction to Statistical Modeling (Linear Regression, Logistic Regression); Introduction to Machine Learning (Decision Trees, Random Forests, Support Vector Machines); Model Evaluation and Selection (Cross-validation, Metrics); Predictive Modeling Techniques.

#### **Reference books and suggested readings**

- Motwani B., (2022). *Data analytics with R*, New Delhi: Wiley India Pvt. Ltd.
- Rahul K., Kumar U. D., (2022). *Machine Learning Using R*. New Delhi: Wiley India Pvt. Ltd.
- Acharya S., (2018). *Data Analytics Using R*. McGraw Hill India.
- Grolemond, G., & Wickham, H. (2017). *R for data science*. O'Reilly Media.

### **Data Warehousing and Data Mining**

#### **Credits -3**

#### **Course Objectives:**

1. To provide students with a comprehensive understanding of data warehousing concepts and principles.
2. To equip students with the skills to design, implement, and utilize data warehouses for business intelligence.
3. To provide students with a comprehensive understanding of data mining concepts and methods.
4. To enable students to apply data mining to real-world business scenarios.

#### **Course Outcomes:**

Upon successful completion of this course students will be able to:

1. Design, implement, and manage data warehouses to support business decision-making.
2. Apply data warehousing concepts and techniques to solve real-world business problems.
3. Apply data mining techniques to solve business problems.
4. Evaluate and interpret the results of data mining models.

#### **Unit 1: Foundations of Data Warehousing**

Introduction to Data Warehousing: Concepts, benefits, and challenges; Data Warehousing Architectures; Data Modeling for Data Warehouses; ETL Process; Data Cleaning and Preprocessing; Metadata Management.

#### **Unit 2: Data Warehousing Implementation and Applications**

Data Warehouse Design; OLAP Operations; Data Warehousing Tools and Technologies: Data Visualization and Reporting; Data Warehouse Project Management; Emerging Trends in Data Warehousing

#### **Unit 3: Data Mining Fundamentals**

Introduction to Data Mining; Data Preprocessing; Data Mining Techniques: Association rule mining (Apriori, FP-Growth), classification (decision trees, Naive Bayes, support vector

machines), clustering (k-means, hierarchical clustering, DBSCAN), and regression; Model Evaluation and Validation.

#### **Unit 4: Data Mining Applications and Advanced Topics**

Data Mining Applications: CRM, market basket analysis, fraud detection, risk management, and other business areas; Text Mining; Web Mining; Big Data Analytics and Data Mining; Data Mining and Business Strategy; Ethical Considerations in Data Mining.

#### **Reference Books and Suggested Readings:**

- Kimball, R., & Ross, M. (2013). *The data warehouse toolkit: The complete guide to dimensional modeling (3rd ed.)*. Wiley.
- Inmon, W. H. (2005). *Building the data warehouse (4th ed.)*. John Wiley & Sons.
- Bhatia P. (2019), *Data Mining and Data Warehousing Principles and Practical Techniques*. Cambridge university press.
- Tan, P.-N., Steinbach, M., Kumar, V. (2018). *Introduction to Data Mining (2<sup>nd</sup> Edition)*. Pearson.

## **Machine Learning**

**Credits- 3**

#### **Course Objectives:**

1. Introduce fundamental concepts of machine learning and its relevance to business;
2. Equip students with the skills to apply machine learning techniques to solve business problems;
3. Demonstrate the integration of machine learning models into business decision-making processes;
4. Foster an understanding of ethical considerations and best practices in deploying machine learning solutions in business.

#### **Course Outcomes:**

1. Understand and explain key machine learning concepts and algorithms;
2. Apply appropriate machine learning techniques to analyze business data;
3. Interpret and communicate the results of machine learning models to inform business decisions;
4. Recognize and address ethical issues related to the use of machine learning in business.

#### **Unit 1: Introduction to Machine Learning in Business**

Overview of machine learning and its significance in business; Types of machine learning: supervised, unsupervised, and reinforcement learning; Key concepts: features, labels, training, and testing datasets; Business applications of machine learning: customer segmentation, demand forecasting, and recommendation systems.

#### **Unit 2 : Data Preparation and Exploration**

Understanding business data: types and sources; Data preprocessing: cleaning, normalization, and transformation; Exploratory data analysis: identifying patterns and insights; Feature engineering: selecting and creating relevant features for modeling.

### **Unit 3 : Machine Learning Algorithms and Models**

Supervised learning algorithms: linear regression, logistic regression, decision trees, and support vector machines; Unsupervised learning algorithms: clustering methods and principal component analysis; Model evaluation: metrics such as accuracy, precision, recall, and F1-score; Overfitting and underfitting: concepts and prevention techniques.

### **Unit 4 : Implementing Machine Learning in Business**

Case studies: successful applications of machine learning in various industries; Tools and platforms for deploying machine learning models in business settings; Challenges in implementing machine learning solutions: data privacy, scalability, and integration with existing systems; Ethical considerations: bias, transparency, and accountability in machine learning applications.

#### **Text Books:**

- Kumar, U. D. (2017). *Machine Learning Using Python*. Wiley.
- Shmueli, G., Bruce, P. C., Yahav, I., Patel, N. R., & Lichtendahl, K. C. (2023). *Machine Learning for Business Analytics: Concepts, Techniques, and Applications in R* (2nd Edition). Wiley.

#### **Reference Books:**

- Kumar, U. D. (2017). *Business Analytics: The Science of Data-Driven Decision Making*. Wiley.
- Provost, F., & Fawcett, T. (2013). *Data Science for Business: What You Need to Know About Data Mining and Data-Analytic Thinking*. O'Reilly Media.

## **Optimization and Simulation Modeling**

### **Credits –3**

#### **Course Objectives:**

1. To provide students with a comprehensive understanding of various optimization techniques.
2. To equip students with the skills to formulate real-world business problems as optimization models.
3. To explain the techniques for validating, verifying, and analyzing simulation models.
4. To illustrate the application of simulation to improve business process performance and decision-making.

#### **Course Outcomes:**

Upon successful completion of this course students will be able to:

1. Formulate and solve optimization problems using appropriate techniques.
2. Develop and use simulation models to analyze complex systems and processes.
3. Interpret and apply the results of optimization and simulation studies for informed decision-making.
4. Select and utilize appropriate software tools for optimization and simulation.

### **Unit 1: Introduction to Optimization**

Overview of Optimization; Linear Programming (LP); Network Optimization: Transportation problem, assignment problem, shortest path problem, maximum flow problem; Integer Programming (IP).

### **Unit 2: Advanced Optimization Techniques**

Non-linear Programming (NLP); Dynamic Programming (DP); Metaheuristics; Applications of Optimization: Supply chain management, resource allocation, portfolio optimization, pricing strategies.

### **Unit 3: Introduction to Simulation Modeling**

Overview of Simulation; Random Number Generation; Probability Distributions; Discrete-Event Simulation (DES); Simulation Softwares.

### **Unit 4: Advanced Simulation and Applications**

Input Data Analysis; Model Validation and Verification; Statistical analysis of simulation results; Design of Experiments (DOE); Applications of Simulation: Manufacturing systems, service operations, healthcare, finance, project management; Combining Optimization and Simulation

### **Reference Books and Suggested Readings**

- Hillier, F. S., & Lieberman, G. J. (2021). *Introduction to operations research (11th ed.)*. McGraw-Hill Education.
- Taha, H. A. (2022). *Operations research: An introduction (11th ed.)*. Pearson.
- Law, A. M. (2024). *Simulation modeling and analysis (6th ed.)*. McGraw-Hill Education.
- Banks, J., Carson II, J. S., Nelson, B. L., & Nicol, D. M. (2010). *Discrete-event system simulation (5th ed.)*. Pearson

## **Predictive Modeling**

### **Credits-3**

#### **Course Objectives:**

1. Introduce fundamental concepts of predictive modeling and its relevance to business decision-making;
2. Equip students with the skills to develop and implement predictive models to solve real-world business problems;
3. Demonstrate the integration of predictive analytics into strategic business processes;
4. Foster an understanding of ethical considerations and best practices in deploying predictive models in business.

#### **Course Outcomes:**

By the end of this course, students will be able to:

1. Understand and explain key predictive modeling concepts and techniques;
2. Apply appropriate predictive modeling methods to analyze business data;
3. Interpret and communicate the results of predictive models to inform business strategies;
4. Recognize and address ethical issues related to the use of predictive modeling in business.

### **Unit 1 : Introduction to Predictive Modeling in Business**

Overview of predictive modeling and its significance in business; Types of predictive models: regression, classification, and clustering; Key concepts: dependent and independent variables, training and testing datasets; Business applications of predictive modeling: customer segmentation, sales forecasting, and risk assessment.

### **Unit 2 : Data Preparation and Exploration**

Understanding business data: types and sources; Data preprocessing: cleaning, normalization, and transformation; Exploratory data analysis: identifying patterns and insights; Feature engineering: selecting and creating relevant features for modeling.

### **Unit 3: Predictive Modeling Techniques and Tools**

Regression analysis: linear and logistic regression models; Classification techniques: decision trees, k-nearest neighbors, and support vector machines; Clustering methods: k-means and hierarchical clustering; Model evaluation: metrics such as accuracy, precision, recall, and F1-score; Overfitting and underfitting: concepts and prevention techniques.

### **Unit 4 : Implementing Predictive Models in Business**

Case studies: successful applications of predictive modeling in various industries; Tools and platforms for deploying predictive models in business settings; Challenges in implementing predictive solutions: data privacy, scalability, and integration with existing systems; Ethical considerations: bias, transparency, and accountability in predictive modeling applications.

#### **Text Books:**

- Kumar, U. D. (2017). *Business Analytics: The Science of Data-Driven Decision Making*. Wiley.
- Mohbey, K. K., Pandey, A., & Rajput, D. S. (2020). *Predictive Analytics Using Statistics and Big Data: Concepts and Modeling*. Bentham Science Publishers.

#### **Reference Books:**

- Saurav, S. (2022). *Forecasting and Predictive Analytics*. BPB Publications.
- Nooruddin, S. (2023). *Predictive Analytics for the Modern Enterprise: A Practitioner's Guide to Designing and Implementing Solutions*. O'Reilly Media.

## **Natural Language Processing**

### **Credit-3**

#### **Course Objectives:**

1. To introduce fundamental concepts of NLP and its relevance in business applications.
2. To equip students with practical NLP techniques for text processing, classification, and analysis.
3. To explore advanced NLP models, including deep learning approaches, for solving business problems.
4. To apply NLP in key business domains such as finance, marketing, e-commerce, and decision-making.



**Course Outcomes:**

1. Develop a strong foundation in NLP concepts and their applications in business.
2. Implement various NLP techniques for text classification, sentiment analysis, and information extraction.
3. Design and deploy chatbots and conversational agents for business automation.
4. Apply NLP solutions in key business areas such as finance, marketing, and e-commerce.

**Unit 1: Foundations of NLP for Business**

Introduction to NLP in Business Contexts; Language Fundamentals & Challenges in NLP; NLP Pipelines: Data Acquisition, Cleaning, and Preprocessing;

**Unit 2: Text Representation and Classification**

Classical NLP vs. Machine Learning vs. Deep Learning Approaches; Text Representation: Bag of Words, TF-IDF, Word Embeddings; Text Classification Techniques: Naïve Bayes, Logistic Regression, SVM.

**Unit 3: Information Extraction and Conversational AI**

Named Entity Recognition (NER) & Relationship Extraction; Information Retrieval and Keyphrase Extraction; Chatbot Development and Conversational Agents in Business.

**Unit 4: Advanced NLP Applications in Business Domains**

NLP for Finance: Sentiment Analysis in Stock Markets; NLP for E-Commerce: Product Recommendations and Review Analysis; NLP for Social Media: Brand Monitoring and Fake News Detection; NLP Deployment, Monitoring, and AI Ethics in Business

**Text Books:**

- Jurafsky, D., & Martin, J. H. (2009). Speech and Language Processing. Prentice Hall.
- Manning, C., & Schütze, H. (1999). Foundations of Statistical Natural Language Processing. MIT Press.
- Vajjala, S., Majumder, B., Gupta, A., & Surana, H. (2020). Practical Natural Language Processing: A Comprehensive Guide to Building Real-World NLP Systems. O'Reilly Media.

**Reference Books:**

- Kumar, E. (2011). Natural Language Processing. IK International Publishing House.
- Goldberg, Y., & Hirst, G. (2017). Neural Network Methods in Natural Language Processing. Morgan & Claypool Publishers.