MBA Programme
Batch of 2025-2027

Vision

To form responsible leaders who are globally competent to lead a life based on values

Mission

- To provide a conducive learning environment for the integral development of individuals to develop the right attitude, relevant skills and needed knowledge to adapt to the corporate world
- To remain as a centre of learning by innovative pedagogy and appropriate academic strategies with exposure to industries.
- To contribute to the field of business education and industries through research, training, and consultancy

Program Educational Objectives

PEO1: Forming Responsible Leaders

PEO2: Holistic Human Development

PEO3: Domain Knowledge with Professional Competency

PEO4: Research Interest and Consultancy

Program Outcomes

PO1 - Integral development and Responsibility

PO2 - Critical Thinking and Problem-Solving Skills

PO3 - Interpersonal and Leadership skills

PO4 - Domain Knowledge

PO5 - Entrepreneurial Interest

PO6 - Ethical Consideration

PO7 - Research and Consulting for continuous learning

PO8 - Recent Development in Business: Local and Global Perspective

1. Courses

- Courses in the first and second semesters are common to all the students.
- Five areas of specialisations / electives are offered: (i) Finance (ii) Marketing (iii) Human Resources (iv) IT and Analytics (v) Supply Chain Management
- The students will have to choose two (dual) specialisations / electives areas of their choice, in the third and fourth semesters.
- Students will take 3 courses in III semester and 2 courses in IV semester from the two areas of specialisations/electives.

2. Summer Internship Placement (SIP)

- Students have to undergo internship in a company during the time period fixed by the institute.

3. Project and Dissertation

Students will have to do a project during the second year in their areas of specialisation.

4. Comprehensive Viva-Voce

During the end of the fourth semester, the students will attend a viva -voce and will be tested on all elective courses chosen by them.

For successful completion of MBA programme, a student must earn 107 credits as given below:

Semester	Courses & Credits						
	Core	**Specialisation / Elective**	**Summer Internship Placement**	**Project and Dissertation**	**Comprehensive Viva Voce (for all electives 3 & 4 sem)**	**MOOC NPTEL**	**Credits**
I	24	-	-	-	-		24
II	23	-	-	-	-		23
III	3	24	4		-		31
IV	3	16	-	2	2	2	25
					Total		**103**
					SHEPHERD		**4**
					GRAND TOTAL		**107**

COURSE STRUCTURE FOR TWO - YEAR MBA PROGRAMME

2025 - 2027

		Title	Credits
I Semester	25PBA1101	Business, Government and Society	3
	25PBA1102	Managerial Economics	3
	25PBA1103	Financial Statement Analysis	3
	25PBA1104	Organizational Behaviour	3
	25PBA1105	Quantitative Techniques for Managers	3
	25PBA1106	Business Communication - I	3
	25PBA1107	Introduction to Business Analytics	3
	25PBA1108	Spreadsheet for Managers	2
	25PBA1109	Indian Knowledge System	1
		Total	**24**
II Semester	25PBA2110	Financial Management	3
	25PBA2111	Marketing Management	3
	25PBA2112	Human Resource Management	3
	25PBA2113	Management Information Systems	3
	25PBA2114	Operations and Supply Chain Management	3
	25PBA2115	Corporate Ethics and Legal Aspects of Business	3
	25PBA2116	Business Research	3
	25PBA2117	Business Communication –II	2
		Total	**23**
III Semester	25PBA3118	Global Strategy	3
	25PBA3119	Summer Internship Placement	4
		Specialisation / Electives	24
		Total	**31**
IV Semester	25PBA4120	Innovation and Entrepreneurship	3
	25PBA4121	Comprehensive Viva Voce Examination	2
		Specialisation / Electives	16
	25PBA4122	MOOC NPTEL	2
	25PBA4123	Project and Dissertation	2
		Total	**25**

Finance

		Title	Credits
III Sem	25PBA3101	Security Analysis and Portfolio Management	4
	25PBA3102	Financial Services	4
	25PBA3103	Banking Services and Fintech Applications	4
	25PBA3104	Accounting Analytics	4
IV Sem	25PBA4101	Financial Derivatives	4
	25PBA4102	Financial Modelling using Spreadsheet	4
	25PBA4103	Corporate Finance and Financial Strategy	4

Marketing

		Title	Credits
III Sem	25PBA3201	Product and Brand Management	4
	25PBA3202	Services Marketing	4
	25PBA3203	Digital Marketing	4
	25PBA3204	Business to Business Marketing	4
IV Sem	25PBA4201	Sales and Distribution Management	4
	25PBA4202	Retail Management	4
	25PBA4203	Marketing Analytics	4

Human Resources

		Title	Credits
III Sem	25PBA3301	Talent Acquisition	4
	25PBA3302	Performance and Compensation Management	4
	25PBA3303	Learning and Development	4
	25PBA3304	Human Resource for Environmental Sustainability	4
IV Sem	25PBA4301	Organizational Change and Development	4
	25PBA4302	Labour Codes	4
	25PBA4303	People Analytics	4

IT & Analytics

		Title	Credits
III Sem	25PBA3401	Machine Learning using Python	4
	25PBA3402	Structured Query Language	4
	25PBA3403	Big Data Analytics	4
	25PBA3404	Software Development and Project Management	4
IV Sem	25PBA4401	Deep Learning & Artificial Intelligence	4
	25PBA4402	Block Chain and Business Applications	4
	25PBA4403	Cyber Security	4

Supply Chain Management

		Title	Credits
III Sem	25PBA3501	Techniques for Demand Forecasting	4
	25PBA3502	Warehouse Management	4
	25PBA3503	Containerisation and Multimodal Transport	4
	25PBA3504	Contemporary Logistics	4
IV Sem	25PBA4501	Global Supply Chain Management	4
	25PBA4502	Port and Airport Management for Logistics	4
	25PBA4503	Risk Modeling for Supply Chain Management	4

CORE COURSES

Semester I

Core Course

Course Code: 25PBA1101 | Title: Business, Government and Society | Credits: 3

I. Course Description

The course aims to have an in-depth understanding of business, government and society in relation to each other. It also helps the students to understand various business formats and its suitability in various business sectors. The students will also appreciate the influence of the government in business and its effect on the society.

II. Course Objectives

1. To understand Indian business and industry from a historical perspective
2. To recognize the various types of environment which impacts business and industry
3. To learn the different types of organizational formats
4. To understand the impact of environmental regulations
5. To examine the power of business and corporate governance

III. Course Content

1. **Business Evolution in India and Governments**
   a. Study of business evolution in India- sectoral preference/ preferences based on geography, religion etc.
   b. Governments' role in assisting growth of Indian business.
   c. Study of sectoral models in major domains
2. **External Environment of Business**
   a. Political
   b. Economical
   c. Social
   d. Technological
   e. Legal
   f. Environment
3. **Forms of Business Organization**
   a. Sole Proprietorship, Partnership, LLP, Joint Stock Companies – Public and Private.
   b. Government regulations relating to business formats.
   c. Regulating businesses and its effect on society.
4. **Corporate and the Natural Environment**
   a. Industrial pollution and environmental regulations.
   b. Managing environmental quality.
   c. Legal framework and ESG.
5. **Corporate Social Business Power**
   a. Nature of Business power and Levels
   b. Spheres of Corporate power
   c. Perspectives of Business power- national and global.
   d. Corporate Governance.

IV. Course Outcomes

By the end of this course a student will be able to

CO1 Understand the evolution of business, policies and programs
CO2 Analyse the impact of different environments of business on society
CO3 Compare different forms of business and its implications
CO4 Examine the impact of regulations on industries and environment
CO5 Appraise the different spheres of corporate power in organisations

V. COs - POs - K Levels Matrix

CO<>PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO6	PO7	PO8	K levels
CO 1	1	2	1	1	2	2	3	3	K2
CO 2	2	2	2	3	3	3	2	2	K4
CO3	1	2	1	3	3			2	K4
CO 4	3	3			2	3	2	2	K4
CO 5	2	3	3		1	3	2	2	K5

VI. Course Materials

a. Mandatory

Steiner, J.F., & Steiner, G.A. (2012). *Business, Government and Society: A managerial perspective - Text and cases.* (13th ed.). The Mc Graw Hill Companies.

b. Additional

Materials to be given by course coordinator.

Core Course

Course Code: 25PBA1102 | Title: Managerial Economics | Credits: 3

I. Course Description

This course combines macro and micro economics and its application in business. The course aims to give the students an understanding of the basic concepts of firms and how consumption and production decisions are made by the consumer and how firms decide in different types of market structures.

II. Course Objectives

1. To understand the key concepts in macroeconomics and is relevance to business.
2. To understand and apply managerial economic theories and constructs and its linkage with other domains.
3. To apply and evaluate demand and supply concepts in organizations
4. To apply and evaluate production and cost function in organizations.
5. To gain knowledge about the market structure and apply them in business.

III. Course Content

1. Introduction to Macroeconomics

a. Introduction to Macro Economics – measurement and other key concepts
b. Business Cycle
c. Fiscal and Monetary Policies

2. Theories of firms

a. Theories of Profit Maximization
b. Managerial theories of the firm
c. Managerial economics and its relationship with other domains

3. Concept of Demand &Supply

a. Law of Demand & Supply
b. Elasticity of Demand & Supply
c. Market Equilibrium

4. Production Theories and Cost Concepts

a. Production factors - Production with one variable input and two variable inputs
b. ISO cost lines - Returns to Scale
c. Cost in short-run and long run

5. Market Structure

a. Perfect Competition
b. Imperfect Competition
c. AI influence in changing market structures.

IV. Course Outcomes

By the end of this course a student will be able to

CO1 Understand the relationships within microeconomics and macroeconomics
CO2 Explain the relevance of different theories in explaining the behavior of firms in various market structures.
CO3 Utilize demand and supply theoretical constructs to assess the impact of external factors on business decision-making.
CO4 Integrate production theories and cost concepts to formulate strategies for cost minimization and profit maximization.
CO5 Evaluate efficiency and competitiveness of markets based on their structures.

V. COs - POs - K Levels Matrix

CO<>PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO6	PO7	PO8	K levels
CO 1		3	3						K2
CO 2		3	3	3					K3
CO3	3			3	3		3		K4
CO4		3		3				3	K5
CO5		3		3				3	K5

VI. Course Materials

a. Mandatory

1. Geetika, P. G. (2013). *Managerial Economics*. New Delhi: Tata McGraw Hill Education

b. Additional

1. Salvatore, D. (2011). *Managerial Economics*. New Delhi: Oxford University Press.

2. Jhingan, M. L. (2014). *Managerial Economics*. New Delhi: Vrinda Publications

Core Course

Course Code: 25PBA1103 | Title: Financial Statement Analysis | Credits: 3

I. Course Description

The objective of this course is to familiarize the students with the accounting process carried out in an organization. This course will give the students an understanding of the concepts in financial accounting and components of financial statements. The course will develop the skills in analyzing and interpreting the income statements, balance sheets and cash flow statements of the organizations.

II. Course Objectives

1. To understand the key concepts of financial accounting and preparation of financial statements.
2. To explain the concepts and contents of the financial statements
3. To justify the role of internal controls in a business
4. To classify the cash flow activities of a business
5. To evaluate the financial performance of an organisation based on its financial statements

III. Course Contents

1. Introduction to Accounting

a. The accounting information system
b. Accounting transactions and the accounting equation
c. Double Entry accounting system
d. Recording transactions in the accounting system
e. Generally Accepted Accounting Principles
f. AI in Accounting

2. Corporate Financial Statements

a. Business Forms
b. Journal entries to financial statements
c. Multi – step income statement
d. Classification of Balance sheet
e. Information beyond the financial statements
   i) Notes to financial statements
   ii) Auditors report
   iii) Management's Discussion and analysis

3. Internal Controls

a. Cash Controls
   Need of Bank reconciliations
   Petty cash funds
b. Accounts Receivables
   Uncollectible – Direct write off and provision method
   Estimating Bad debt – Percentage of sales & receivables approaches
c. Inventory Costing Methods
   FIFO, LIFO and Weighted average method
d. Depreciation Methods
   Straight Line Method
   Reducing Balance Method

4. **Analysis of Financial Statements**
   a. Horizontal and Vertical Analysis
   b. Profitability Analysis
   c. Liquidity Analysis
   d. Solvency Analysis
   e. Dupont Analysis
5. **Statement of Cash Flows**
   a. Statement of cash flows indirect method
   b. Reporting cash flows from operating, investing and financing activities
   c. Analyzing a company's statement of cash flows
      i) Free cash flow
      ii) Cash flow adequacy ratio

IV. Course Outcome

By the end of this course a student will be able to

CO1 Understand the fundamental of business and basic concepts of accounting
CO2 Explain the concepts and contents of the financial statements
CO3 Justify the role of internal controls in a business
CO4 Classify the cash flow activities of a business
CO5 Evaluate the financial performance of an organisation based on its financial statements

V. COs - POs - K Levels Matrix

CO<>PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO6	PO7	PO8	K levels
CO 1	2	3		3					K2
CO 2		3		3				3	K3
CO3		3		3					K3
CO4		3		3	2				K4
CO5		3		3	2		3		K5

IV. Course Materials

a. Mandatory

Wild, J. J., & Singh, P. (2021). *Financial Accounting Information for Decisions.* Chennai: McGrawHill.

b. Additional

Narayanaswamy, R. (2017). Financial Accounting: A Managerial Perspective. PHI Learning; 6th edition.

Core Course

Course Code: 25PBA1104 | Title: Organizational Behaviour | Credits: 3

I. Course Description

This course provides fundamental theories and concepts of individual behavior (intrapersonal), group behavior(interpersonal) and organizational systems. Group behavior facilitates experiential learning of approaches to decision making, leadership, negotiation, power and politics. In organizational system the focus is on structure, culture, climate and change management to improve organizational effectiveness.

II. Course Objectives

1. To introduce students to various OB models
2. To learn various aspects of work place attitudes, job commitment and motivation
3. To know the personality, perception and traits
4. To understand the process of conflict and negotiation
5. To explain the components of culture, climate and its importance

III. Course Content

1. **Introduction to Organizational Behavior**
   a. Nature and Discipline of OB
   b. Managing Diversity in the workplace
   c. Challenges and Opportunities for OB
2. **Job satisfaction and involvement**
   a. Attitudes at the Workplace
   b. Importance of Job satisfaction
   c. Emotions and moods
3. **Intrapersonal Dynamics**
   a. Personality and Traits
   b. Perception
   c. Judgements and Decision making
   d. Motivation Theories
4. **Interpersonal Dynamics**
   a. Foundations of Group behaviour
   b. Understanding work teams
   c. Leadership Theories
   d. Trust and Mentoring
   e. Power and Politics
   f. Conflict and Negotiation Management

5. **The Organisation as a System**
   a. Organization Culture
   b. Creating and sustaining culture
   c. Organizational Change
   d. Creating a culture for Change

IV. Course Outcomes

By the end of this course a student will be able to

CO1 Understand the nature and the discipline of organisational behaviour
CO2 Illustrate the importance of job satisfaction and job involvement
CO3 Understand the various factors that contribute to work motivation
CO4 Emphasize the relevance of working in teams in modern day organizations
CO5 Explain various organisation cultures and identify them with the real world

V. COs - POs - K Levels Matrix

CO<>PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO6	PO7	PO8	K levels
CO 1	3	1	3	3		**1**			K2
CO 2	**3**	2	3	3		2			K5
CO3	**3**	2	**3**	3		1			K5
CO4	**3**	3	**3**	3		1			K5
CO5	**3**	**2**	3	3		1			K5

VI. Course Materials

a. Mandatory

Robbins, S. P. (2018). *Organizational behaviour.* (18th ed.). Pearson.
Luthans, F. (2011). *Organizational Behaviour-An evidence-based approach.* (12th ed.). McGraw-Hill.

b. Additional

Quick, J. C., Nelson, D. L., & Khandelwal, P. (2014). *Organizational behaviour* (7th ed.). Cengage Learning.

Core Course

Course Code: 25PBA1105 | Title: Quantitative Techniques for Managers | Credits: 3

I. Course Description

This course provides an in-depth understanding of mathematical and statistical techniques essential for managerial decision-making. It covers fundamental concepts such as differentiation, optimization methods, descriptive statistics, probability distributions, and sampling techniques. The focus is on real-world business applications through problem-solving and computational tools.

II. Course Objectives

a. To use differentiation to solve business-related problems.
b. To apply optimization techniques for business decision making.
c. To analyse business data using descriptive statistics.
d. To interpret probability distributions in business contexts.
e. To apply inferential statistics for data-driven decision-making.

III. Course Content

1. Differentiation and its Business Applications

a. Introduction to Differentiation
b. Formulation of functions
c. Differentiation of basic functions
d. Business applications of differentiation

2. Optimization Techniques for Business Decision Making

a. Assignment problem
b. Transportation problem
c. Formulation of linear programming problem
d. Application of TORA for solving AP, TP and LPP

3. Descriptive Statistics for Business Analysis

a. Central Tendency and Dispersion
b. Regression and Correlation
c. Time Series
d. Index Numbers

4. Probability Distribution

a. Introduction to probability
b. Binomial distribution and Poisson distribution
c. Normal distribution
d. Business applications of probability distributions

5. Inferential Statistics for Business Decisions

a. Introduction to Sampling Theory
b. t – test, Z test: Concepts and applications

c. Chi-square test and its applications
d. ANOVA and its applications

IV. Course Outcomes

By the end of this course a student will be able to

CO1: Apply differentiation techniques to optimize business functions.
CO2: Apply optimization models to formulate and solve business problems.
CO3: Analyse and interpret business data using descriptive statistics.
CO4: Apply probability distribution models for business applications.
CO5: Apply inferential statistics to support managerial decision-making.

V. COs - POs - K Levels Matrix

CO<>PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO6	PO7	PO8	K levels
CO 1		3		3			2	2	K3
CO 2		3		3			2	2	K3
CO3		3		3			3	2	K4
CO4		3		3			2	2	K3
CO5		3		3			3	2	K3

VI. Course Materials

a. Mandatory

Levin, R. I., Rubin, D. S., Rastogi, S., & Siddiqui, M. H. (2023). Statistics for Management (7 ed.). New Delhi: Pearson Education.

b. Additional

Mariappan, P. (2015). *Business mathematics*. Pearson.
Beri, G.C. (2013). Business Statistics (2 ed.). New Delhi: McGraw Hill.

Core Course

Course Code: 25PBA1106 | Title : Business Communication I Credits: 3

I. Course Description

This course provides a comprehensive overview of essential communication skills for professional success. It emphasizes the development of effective listening, analytical reading, business writing, and public speaking abilities. Students will also learn crucial business etiquette, including cross-cultural and digital communication practices. Through practical exercises and real-world applications, participants will enhance their ability to communicate clearly, confidently, and professionally in diverse business settings, including the use of modern AI tools.

II. Course Objectives

Students will be enabled

1. To identify and apply different listening techniques (intensive, extensive, emotional) and recognize common listening barriers
2. To analyze and interpret complex business documents, academic texts, and extract key information.
3. To produce clear, concise, and professional business documents (emails, memos, reports), while utilizing appropriate AI writing tools.
4. To deliver confident and engaging presentations, participate effectively in conversations, and utilize non-verbal communication appropriately
5. To apply appropriate business etiquette in telephone, cross-cultural, and digital communication scenarios.

III. Course Content

1. **Organizational Listening**
   a. Intensive & Extensive Listening
   b. Emotional Listening
   c. Listening Barriers
   d. AI Driven Listening
2. **Analytical Reading**
   a. Effective Comprehension & Inferences
   b. Academic Reading
   c. Reading Business Documents
   d. Reading for Others
3. **Business Writing**
   a. Academic Writing
   b. Business Messages, Emails & Letters
   c. Memos, notices, agenda and minutes, Business reports
   d. AI in Business Writing

4. **Speaking**
    a. Non-Verbal Communication
    b. Public Speaking
    c. Product Pitch/Sales Talk
    d. Presentations
5. **Business Etiquette**
    a. Conversations
    b. Telephone Etiquette
    c. Cross Cultural Communication
    d. Digital Communication

IV. Course Outcomes

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

CO1 Demonstrate improved ability to accurately comprehend and retain information from various oral communications, and utilize AI listening tools.

CO2 Summarize and synthesize information from diverse written sources, and read and interpret documents for others.

CO3 Create effective written communication that meets the specific needs of various business situations, and produce academic writing.

CO4 Showcase improved public speaking skills and effectively communicate their ideas in various professional settings, including product pitches.

CO5 Exhibit professional communication behaviors, such as respectful dialogue and culturally sensitive language, resulting in improved collaboration and stronger professional connections.

COs - POs - K Levels Matrix

CO<>PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO6	PO7	PO8	K levels
CO 1	3								K3
CO 2	3	3							K3
CO3	3	3				3			K6
CO4								3	K5
CO5	3		3						K6

VI. Course Materials

a. Mandatory

a. Chaturvedi, P. D. (2024). The Art and Science of Business Communication - Skills, concepts and Applications. Noida UP: Pearson India Education Services Pvt. Ltd.

b. Additional

a. Mukerjee, Hory Sankar. (2016). Business Communication - Connecting at Work. (2 ed). New Delhi: Oxford University Press

Core Course

Course Code: 25PBA1107 | Title: Introduction to Business Analytics | Credits: 3

I. Course Description

The course aims to prepare students to provide adequate knowledge of Business Analytics that can be used for problem solving and decision making in business. This course introduces the students to basics of Python programming and data visualization; thereby enhancing their programming and analytical skills.

II. Course Objectives

1. To understand types of analytics and the concepts of KPI and its importance in business environment.
2. To Learn Prompt Engineering and their usage in Business
3. To learn and apply the basics programming skills of Python Program.
4. To examine the different python Libraries and its usage for data analysis.
5. To apply the techniques of data visualization using Power BI

III. Course Content

1. Business Analytics

a. Data Driven Strategies
b. Business Intelligence
c. Types of Analytics
d. Different models in Analytics
e. Key Performance Indicators
f. Developing KPI
g. Data Hackathon

2. Prompt Engineering

a. Generative AI
b. Types of Prompts
c. Prompt Templates
d. Prompting Tools
e. Use case of Prompting

3. Python - I

a. Basics, Variables, Operators
b. Data types, Lists
c. Tuples, Dictionary
d. Control Statements
e. If, if else, Switch, Looping
f. Directory

4. Python - II

a. Functions, Modules, Files, Exception

b. Python Libraries
c. Programs using Python Libraries
d. Pre-processing data
g. Exploratory Data Analysis

5. Data Visualization

a. Power BI Menu
b. Data Sources
c. Sorting, filtering and Charts
d. Queries, Data Model, Relationship
e. Dash Board and Story Board

IV. Course Outcomes

By the end of this course a student will be able to

CO1 Explain different analytics types and identify relevant KPIs for different business Sectors
CO2 Use Prompt Engineering for business uses
CO3 Apply foundational Python basic codes for programming constructs.
CO4 Use Python libraries for data analysis
CO5 Analyse datasets using Power BI

V. COs - POs - K Levels Matrix

CO<>PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO6	PO7	PO8	K levels
CO 1	3	3	3	3				3	**K3**
CO 2	3	3	3	3	2		3		**K4**
CO3	3	3	3	3			3	3	**K2**
CO4	3	3		3	2		3	3	**K4**
CO5	3	3		3			3	3	**K5**

VI. Course Materials

a. Mandatory

Schniederjans Marc J, Schniederjans Dara G. Starkey Christopher M. (2022). *Business Analytics Principles, Concepts, and Applications: What, why, and how*, (1st ed.). Person Education.

b. Additional

1. Hardoon,D.R., & Galit, S. (2013). *Getting started with Business analytics*. CRC Press.
2. Martin, B.C. (2018). *Python - The complete reference*. Tata McGraw Hill.
3. O'Connor Errin. (2020). *Microsoft Power Bi Dashboards Step By Step*,(1 st ed.). Pearson Edition.

Core Course

Course Code: 25PBA1108 | Title: Spreadsheet for Managers |Credits: 2

I. Course Description

This course equips the students with skills for the effective use of Spread sheet in order to prepare data report, analyze data set, presenting it effectively through MS Excel.

II. Course Objectives

1. To learn the basics of worksheet manipulation
2. To explore the financial and logical functions in Excel
3. To study lookup, reference, mathematical, statistical and financial functions.
4. To apply the various data tools for analysis
5. To examine data analysis tools and its applications

III. Course Content

1. **Work sheet Manipulation**
   a. Home
   b. Sort and Filtering
   c. Conditional Formatting
2. **Functions in Spreadsheet - I**
   a. Financial
   b. Logical
   c. Data and Time
3. **Functions in Spreadsheet - II**
   a. Lookup and Reference
   b. Mathematical
   c. Statistical
4. **Data Tools**
   a. Sparklines
   b. Get Data
   c. Data Validation
   d. Text to Columns
   e. Remove Duplicates
   f. Consolidate
5. **Data Analysis**
   a. Pivot Tables
   b. What if Analysis
   c. Group and ungroup
   d. Data Analysis Tool Pack
   e. Solver

IV. Course Outcomes

By the end of this course a student will be able to

CO1 Demonstrate the ability to effectively utilize Excel's formatting and page layout tools to enhance data presentation and organization.

CO2 Evaluate the efficiency and appropriateness of Excel functions for different tasks and determine the most suitable functions based on data analysis requirements.

CO3 Assess data using mathematical, statistical, and financial functions to derive meaningful conclusions and insights.

CO4 Evaluate the efficiency and appropriateness of data tools in Excel and choosing the most suitable tools for different data management scenarios.

CO5 Design custom scenarios for predicting outcomes and analyzing the impact of different variables on data.

V. COs - POs - K Levels Matrix

CO<>PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO6	PO7	PO8	K levels
CO 1		3		3			3		K2
CO 2		3		3	2		3		K5
CO3		3		3	2		3		K5
CO 4		3		3	2		3		K5
CO 5		3		3			3		K6

VI. Course Materials

a. Mandatory

Walkenbach, J. (2015). *Microsoft excel 2016 Bible.* Wiley Publishing.

b. Additional

Peter, W. (2013). *Office 2013: All-in-one for dummies*. Wiley Publishing.

Core Course

Course Code: 25PBA1109 | Title: Indian Knowledge System | Credit: 1

I. Course Description

This course explores the Indian Knowledge System (IKS) and its relevance in leadership, strategy, and well-being. Drawing from Thirukkural, Gandhian Economics, and Indian aesthetics, it provides insights into ethical decision-making, economic models and productivity. The course integrates traditional wisdom with contemporary applications to develop responsible leaders and sustainable business strategies.

II. Course Objectives

1. Understand key principles of Indian Knowledge traditions and their impact on leadership, strategy, and well-being.
2. Apply ethical decision-making frameworks derived from Thirukkural, and Gandhian thought in management and governance.
3. Integrate Indian aesthetics, mindfulness, and sustainability into modern business and branding strategies.

III. Course Content

1. Ethical Leadership and Governance – Insights from *Thirukkural*
   a. Introduction to Indian Knowledge System (IKS).
   b. Leadership Lessons from *Thirukkural* – Ethics and Governance.
   c. *Thirukkural* and Decision-Making in Management.

2. Economic and Strategic Thought – Ancient Indian Models
   a. Sustainable Indian Business Models
   b. Gandhian Economics – Trusteeship and Inclusive Growth

3. Indian Aesthetics and Branding – *Rasa Theory* in Marketing
   a. Understanding the nine *Rasas* (emotional flavors)

IV. Course Outcomes

By the end of this course a student will be able to

CO1 Develop leadership and governance strategies based on *Thirukkural*.

CO2 Utilize ancient Indian economic and strategic models to create sustainable and inclusive business models.

CO3 Apply Indian aesthetics and *Rasa Theory* to enhance branding and productivity.

V. COs - POs - K Levels Matrix

CO<>PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO6	PO7	PO8	K levels
CO 1	3	3	3	3				3	**K2**
CO 2	3	3	3	3	2		3		**K4**
CO3	3	3	3	3			3	3	**K5**

VI. Course Materials

1. Panneerselvam, R. (2017). *Thirukkural: Pearls of Inspiration for Ethical Leadership.* Chennai: International Institute of Tamil Studies.
2. Dey, S. (2021). *Sustainability in Indian Thought: Ancient Wisdom for Modern Business.* New Delhi: Sage Publications.
3. Mukherjee, S. (2016). *Gandhian Economics and Sustainable Development.* London: Routledge.
4. Kapoor, A. (2017). *Branding with Indian Aesthetics: Lessons from Rasa Theory.* New Delhi: Oxford University Press.

CORE COURSES

Semester II

Core Courses

Course Code: 25PBA2110 | Title: Financial Management | Credits: 3

I. Course Description

The course is to familiarize students with the four major decision areas of finance, viz. investment, financing, earnings distribution and liquidity decisions. Subsequently, the students will be offered an integrated view of finance decisions through the process of valuation and risk management. The course aims at sharpening the financial decision-making skills of the participants.

II. Course Objectives

1. To know the importance of time value of money
2. To compute cost of capital
3. To evaluate the investment proposals using capital budgeting techniques
4. To examine the capital structure decisions
5. To analyse the Working capital requirement

III. Course Content

1.Introduction to Financial Management

a. Goals of Financial Management
b. Finance Function
c. Financial Markets & Financial Instruments
d. Time Value of Money

2. Cost of Capital

a. Cost of Capital
b. Factors influencing the cost of capital
c. Specific cost of capital
d. Weighted average cost of capital

3. Investment Decisions

a. Nature and Types of Investment Decisions
b. Investment Evaluation Criteria

4. Capital Structure

a. Optimal Capital Structure
b. Capital Structure Theories
c. EBIT - EPS approach
d. Leverage

5. Sources of short-term funds

a. Working Capital
b. Estimating the Working Capital Requirement
c. Managing Cash
d. Managing Receivables

IV. Course Outcomes

By the end of this course a student will be able to:

CO1 Analyse how changes in interest rates and compounding frequencies affect the outcomes of Time value of money calculations and make informed

CO2 Evaluate the appropriateness of the cost of capital for discounting cash flows, assessing project feasibility, and making financing decisions.

CO3 Apply various capital budgeting methods, to assess the feasibility and profitability of investment opportunities.

CO4 Evaluate the trade-offs between debt and equity financing, to make capital structure decisions

CO5 Apply working capital management techniques to optimize the balance between current assets and liabilities.

V. COs - POs - K Levels Matrix

CO<>PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO6	PO7	PO8	K levels
CO 1	2	**3**		**3**			**2**	**1**	K4
CO 2	**2**	**3**		**3**	3	3			K5
CO3	2	**3**		**3**	**3**		**2**		K3
CO 4	**2**	**3**		**3**	**3**	**3**	**2**	**1**	K5
CO 5	**2**	**3**		**3**	**3**			**1**	K3

VI. Course Materials

a. Mandatory

Khan M.Y. & Jain P.K. (2019). *Financial management - Text, problems and cases*. (8th ed.). McGraw Hill Education (India) Private Limited.

b. Additional

1. Brigham, E.F. & Ehrhardt, M.C. (2010). *Financial management.* (13th ed.). Cengage Learning.
2. Chandra, P.N. (2019). *Financial management - Theory and practice.* (10th ed.). McGraw Hill Education (India) Pvt. Ltd.
3. Pandey, I.M. (2015). *Financial management*. (11th ed.). Vikas Publishing House Pvt. Ltd.

Core Course

Course Code: 25PBA2111 | Title: Marketing Management |Credits: 3

I. Course Description

The course helps the students to understand the basic concepts in marketing. The course covers marketing approaches, marketing environment, consumer behavior, segmentation, targeting and positioning, product, pricing, place and promotion mix with special emphasis on AI.

II. Course Objectives

1. To understand the fundamental marketing concepts, approaches to marketing, and the factors influencing the marketing environment.
2. To demonstrate an understanding of the consumer markets and buyer behavior.
3. To identify the product and pricing strategies.
4. To explain the components of distribution.
5. To assess the components of the promotion mix.

III. Course Content

1. Introduction to Marketing

a. Core Marketing Concepts
b. Approaches to Marketing
c. Value Philosophy
d. Marketing Environment
e. Marketing Mix

2. Consumer Markets and Buyer Behavior

a. Characteristics affecting Consumer Behavior
b. Psychological Processes
c. Buying Decision Behavior and the Buying Decision Process
d. Market Segmentation, Market Targeting, Differentiation and Positioning
e. Decoding consumer behavior Using AI.

3. Product and Price Mix

a. Product Levels and Classifications
b. The New Product Development Process
c. Product Life-Cycle
d. Pricing
e. AI for product and pricing decisions

4. Place Mix

a. Distribution - importance from a marketing purview
b. Channel functions and flow
c. Channel levels - Marketing channels including D to C
d. Channel design decisions.
e. AI in distribution management

5. Promotion mix

a. Integrated Marketing Communication - Core components
b. Communicating Value - Advertisements
c. Sales Promotion
d. Influence of micro and nano influencers for promotions
e. Using AI in advertising and sales promotion.

IV. Course Outcomes

By the end of this course a student will be able to
CO1 List core marketing concepts, approaches to marketing, and key elements of the marketing environment.
CO2 Infer the underlying principles affecting consumer behavior
CO3 Analyse the product and pricing strategies for different market conditions.
CO4 Analyse the components of distribution.
CO5 Assess the components of the promotion mix.

V. COs - POs - K Levels Matrix

CO<>PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO6	PO7	PO8	K levels
CO 1		2		3				2	K1
CO 2		2	1	3		1	1	2	K2
CO3		2		3		1		2	K4
CO 4	1	2		3		1		2	K4
CO 5		2	1	3	2		1	3	K5

VI. Course Materials

a. Mandatory

Kotler, P., Armstrong, G. , Balasubramanian, S. & Agnihotri, P. (2023). *Principles of marketing.* (19th ed.). Pearson Education.

b. Additional

1. Ramaswamy, V.S. & Namakumari, S. (2018). *Marketing management: Indian context –*
   Global perspective. (6th ed.). SAGE Publications India Pvt. Ltd.
2. Kumar, A.N. & Meenakshi, N. (2016). *Marketing management* (3rd ed.). Vikas Publishing House

Core Course

Course Code: 25PBA2112 | Title: Human Resource Management | Credits: 3

I. Course Description

This course focus on all aspects of managing people at work: planning, job analysis, recruitment and selection, training and development, performance management, remuneration, benefits and career development.

II. Course Objectives

1. To understand of the fundamental concepts and functions of human resource management.
2. To recognize the significance of human resource planning and become familiar with job analysis methods.
3. To learn about the recruitment and selection processes, as well as effective placement strategies.
4. To develop skills in designing various training and development methods.
5. To explore different compensation and performance appraisal methods

III. Course Content

1. **Human Resource Management**
   a. HRM trends
   b. Functions of HRM
   c. HRM Models
2. **Human Resource Planning**
   a. Introduction to Human Resource Planning
   b. Job Analysis
   c. Job Description
   d. Job Specification
   e. Job Designing
3. **Recruitment and Selection Process**
   a. Sources and Steps in Recruitment
   b. Selection Methods
   c. Interviews Types
   d. Placement and Induction
4. **Training and Development**
   a. Training Need Analysis and Methods
   b. Process of training and development
   c. Career planning and development
5. **Performance and Reward Management**
   a. Performance Appraisal Process
   b. Assessment centers, MBO, 360-degree appraisal
   c. Review of Performance appraisal
   d. Compensation and Types
   e. HR Accounting & Audit

IV. Course Outcomes

By the end of this course a student will be able to

CO1 Understand HRM trends, Functions, and Models
CO2 Apply HR planning concepts, Understand Job Analysis
CO3 Demonstrate Recruitment and Selection Skills
CO4 Develop Training Plans, Analyze Training Needs
CO5 Assess and Improve Performance and Reward Systems

V. COs - POs - K Levels Matrix

CO<>PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO6	PO7	PO8	K levels
CO 1	2	1	2	3				2	K4
CO 2	1	3	2	3		2			K3
CO3	3	3	2	3	2				K3
CO4	2	3	3	3	2	2	3		K6
CO5	1	3	2	3	2	2	2	3	K5

VI. Course Materials

a. Mandatory

Dessler, G. (2018). *Human resource management*. (15th ed.). Pearson.

b. Additional

Sharma R.C., & Sharma, N. (2016). *Human resource management*. (1st ed.). Sage.
Durai, P. (2016). *Human resource management*. (2nd ed.). Pearson.

Core Course

Course Code: 25PBA2113 | Title: Management Information Systems |Credits: 3

I. Course Description

Management Information Systems is an applications-oriented course that provides an overview of the role of information systems in business. This course deals information systems in business, functional systems and software development life cycle. It also introduces current technologies used in the different fields of business.

II. Course Objectives

1. To comprehend the various roles of digital systems in modern organizational environments and their application in online commercial transactions.
2. To assess the integration of information technology in supporting and enhancing business functions and decision-making processes.
3. To develop a critical understanding of the methodologies and strategies involved in creating and managing software projects.
4. To explore the business implications of new technological innovations and their relevance to maintaining competitive advantage.
5. To provide strategic information system for a data driven decision making.

III. Course Content

1. **Information Systems in Business**
   a. Types of Information
   b. Data Resource Management
   c. Virtual Company
   d. Knowledge Creating Company
   e. E- Commerce and Payment Processes
2. **Enterprise Business System**
   a. Enterprise collaboration system
   b. Marketing Information System,
   c. Human Resource Information System
   d. Online Accounting Systems
3. **Functional Business Systems**
   a. Customer Relationship Management
   b. Enterprise Resource Planning
   c. Supply Chain Management
   d. Executive Information Systems
   e. Expert Systems
4. **System Development Process**
   a. Software Development Life Cycle
   b. Software Project Management
   c. App Design

5. **Emerging Technologies in Business**
   a. Business Analytics, Machine and Deep Learning
   b. AI and Robotics
   c. Cloud and mobile Computing, IoTs
   d. Block chain and FinTech
   e. Cyber Security

IV. Course Outcomes

By the end of this course a student will be able to

CO1 Classify and critically appraise the integration of digital systems within organizational frameworks, particularly for e-commerce operations.

CO2 Analyze functional business systems like HRIS, Marketing IS and accounting IS which enhances organizational performance.

CO3 Apply principles of the systems development life cycle and project management to effectively oversee software development initiatives.

CO4 Assess the business impact of emergent technologies and synthesize strategies for leveraging these advancements for competitive advantage.

CO5 Analyze business requirements to devise strategic information system solutions that boost administrative performance.

V. COs - POs - K Levels Matrix

CO<>PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO6	PO7	PO8	K levels
CO 1		3		3		1	2		K4
CO 2	1	3	3	3		1	2		K5
CO3	1	3		3	1		3		K5
CO 4	1	3		3	1		2	3	K5
CO 5				3		1	3	3	K5

VI. Course Materials

a. Mandatory

Behl, R., O'Brien, J.A.,& Marakas, G.M., (2019). *Management information systems.* (11th ed.). McGraw Hill Education (India) Private Limited.

b. Additional

Laudon,K., & Laudon,P.J. (2020). *Management information systems: Managing the digital firm. (16th ed.).* Prentice Hall of India Private Limited.

Core Course

Course Code: 25PBA2114 | Title: Operations and Supply Chain Management | Credits: 3

I. Course Description

This course provides a comprehensive understanding of operations and supply chain management, focusing on efficiency, strategic decision-making, and sustainability. Key topics include process management, capacity planning, quality control, logistics, and global supply chain coordination.

II. Course Objectives

1. To understand the fundamental principles of operations and supply chain management.
2. To analyze product and service design, capacity planning, and process optimization in operations.
3. To evaluate supply chain strategies, logistics, and inventory management for effective decision-making.
4. To apply quality control, lean management, and sustainability practices in operations and supply chains.
5. To utilize decision science tools for scheduling, project management, and supply chain performance analysis.

III. Course Content

1. Introduction to Operations and Supply Chain Management

a. Introduction to operations management
b. The role of supply chains in modern business
c. Operations strategy and global competitiveness
d. Productivity and operational efficiency
e. AI, Automation, and Digital Twins in Operations and Supply Chains

2. Product and Service Design in Operations

a. New product development and innovation
b. Service design and process standardization
c. Legal, ethical, and sustainability considerations
d. Designing for quality and manufacturability
e. Mass customization and flexibility in design

3. Process Management and Capacity Planning

a. Process selection and layout decisions
b. Strategic capacity planning
c. Bottleneck and constraint management
d. Demand forecasting and capacity requirements
e. Lean systems and Just-in-Time (JIT) production

4. Supply Chain Strategy and Logistics

a. Supply chain structure and coordination
b. Supplier relationship management and procurement
c. Inventory management and control techniques
d. Transportation, warehousing, and distribution networks
e. Risk management and resilience in supply chains

5. Quality Management and Decision Science in Operations

a. Total Quality Management (TQM) and Six Sigma
b. Statistical Process Control (SPC) and quality standards
c. Scheduling and sequencing models in operations
d. Inventory optimization techniques (EOQ, ABC analysis)
e. Project management tools (PERT, CPM)

IV. Course Outcomes

By the end of this course a student will be able to

CO1: Understand the key concepts of operations and supply chain management.
CO2: Analyse product and service designs considering efficiency, quality, and sustainability.
CO3: Analyze capacity planning, process selection, and inventory management strategies.
CO4: Assess logistics, supply chain integration, and risk management approaches.
CO5: Apply quality control methods and decision science tools for effective operations.

V. COs - POs - K Levels Matrix

CO<>PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO6	PO7	PO8	K levels
CO 1		3		3		1	2	2	K2
CO 2	2	3	3	3		1	2	2	K4
CO3	1	3		3	2		3	2	K4
CO4	1	3		3	1		2	3	K5
CO5				3		1	3	3	K3

VI. Course Materials

a. Mandatory

Stevenson, W. (2022). *Operations management*. (13th ed.). McGraw Hill Education.

b. Additional

Chary, S.N. (2019). *Production and operations management*. (6th ed.). McGraw Hill Education (India) Private Limited.

Core Course

Course Code: 25PBA2115 | Title : Corporate Ethics and Legal Aspects of Business | Credits: 3

I. Course Description

This course imparts awareness to management professionals on how business has to be conducted in the society with codes, principles, ethics and legal aspects. Students will be introduced to the ethical theories and essentials of business laws.

II. Course Objectives

1. To explain the basic concepts of ethics
2. To use theoretical frameworks of ethics in business
3. To discuss the basic concepts relating to business law
4. To examine the various laws relating to contracts and sale of goods in business
5. To explain the importance of intellectual property rights

III. Course Content

1. Basics of Ethics

a. The need for ethical intervention
b. Positions for and against ethics in Business
c. Ethical Dilemma
d. Moral Reasoning
e. Kohlberg's Moral Development theory

2. Ethical Issues in Functional Areas of Business

a. Finance: ethical issues in accounting, finance, banking, takeovers; Whistle blowing: corporate disclosure; Insider trading.
b. HRM: Discrimination, discrimination; Inclusion and preferential hiring; Sexual harassment.
c. Marketing: Green marketing; Product recalls; Ethics and Advertising.
d. Production: Safety and acceptable risk;, Product safety and corporate liability; Green production.
e. Information technology : Cyber-crime; Privacy and internet ethics

3. Introduction to Legal aspects of Business

a. Introduction to Business Laws
b. Structure of the Indian Legal System
c. Sources of Law and Legal System
d. Indian Contract Law
e. Fundamentals of contract laws
f. Formation of Contracts
g. Principles of Contract Laws
h. Types of Contract

i. Performance of contract
j. Discharge of contract
k. Breach of contract and remedies

4. **Sale of Goods Act**

a. Introduction to Sale of Goods
b. Essentials of valid sale
c.types of goods
c. Transfer of Ownership and Property
d. Performance of contract
e.rules relating to delivery of goods
f. Rights of Unpaid Seller

5. **Intellectual Property Rights**

a. Patent Rights
b. Copyright
c.Trademarks
d. Geographical indications

IV. Course Outcomes

By the end of this course a student will be able to
CO1 Understand the basic concepts of ethics
CO2 devise strategies to prevent unethical approaches
CO3 Understand the basic concepts relating to business law
CO4 Examine the various laws relating to contracts and sale of goods in business
CO5 Understand the importance of intellectual property rights

V. COs - POs - K Levels Matrix

CO<>PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO6	PO7	PO8	K levels
CO 1	3	3	3	3		3			K2
CO 2	3	3	3	3		3	3		K3
CO3	3	3		3		3	3	3	K3
CO4	3	3		3		3	3	3	K4
CO5	3	3		3		3	3	3	K3

VI. Course Materials

a. Mandatory

1. Fernando, A.C., Muraleedharan, K.P., & Satheesh, E.K. (2019). Business ethics- An Indian perspective. (3rd ed.). Pearson Publications.
2. Ravinder, K. (2021). Legal aspects of business. (5th ed.). Cengage Learning.

b. Additional

1. Ferrell, O.C. & Paul. J. (2005). Business ethics. (6th ed.). Biztantra Publications.
2. Albuquerque, D. (2013). Business ethics. (5th ed.). Oxford University Press.
3. Velasquez, M. G. (2011). Business ethics - Concepts and cases. (6th ed.). Prentice Hall of India (P) Ltd.
4. Akhileshwar, P. (2018). Legal aspects of Business. (7th ed.). McGraw Hill.

Core Course

Course Code: 25PBA2116 | Title: Business Research | Credits: 3

I. Course Description

This course is designed to provide students with the necessary knowledge and skills to understand and undertake research in various business scenarios. Students will take up a manageable research study, design tools of data collection, analyse the data using software and submit the research report.

II. Course Objectives

1. To understand the basic concepts of research, the process of research and research designs.
2. To review the literature and formulate a problem statement
3. To prepare an instrument for collecting data.
4. To analyse the data using a software.
5. To prepare a quality research report

III. Course Content

1. Introduction to Business Research, Research Process and Design

a. Introduction to Business Research
b. Types of Research
c. Nature, Scope and Significance of Research
d. Scientific Method
e. The Process of Research
f. Research Applications in Business Decisions
g. Features of a Good Research Study
h. Types of Research Designs: Descriptive, Exploratory and Experimental

2. Review of Literature, Problem Formulation and Hypotheses Development

a. Review of Literature: Sources and Importance
b. Problem Identification and Formulation
c. Concept Development
d. Variables - Types
e. Hypotheses – Types and Characteristics
f. Measurement: Types of Scales – Nominal, Ordinal, Interval and Ratio
g. Concepts of Reliability and Validity

3. Data Collection and Selection of Respondents

a. Qualitative Vs. Quantitative Studies
b. Types of Data: Primary Vs. Secondary Data
c. Methods of Data Collection: Observation, Focus Group Discussion, Interviews
d. Case Study
e. Designing of a Questionnaire
f. Sampling Concepts
g. Probability Sampling Designs: Simple Random, Systematic, Stratified Random, Cluster
h. Non-Probability Sampling Designs: Convenience, Judgmental, Snowball, Quota

4. Data Processing and Analysis - Using Software

a. Data Editing and Coding
b. Classification and Tabulation of Data
c. Descriptive Vs. Inferential Analysis
d. Hypotheses Testing: Steps
e. Errors in Hypotheses testing
f. Parametric Tests: 't' – Test, ANOVA
g. Non-Parametric Tests: Chi-Square Test
h. Univariate and multi variate analysis

5. Report Writing

a. Types and Layout of Research Report
b. Techniques of Writing a Research Report
c. Precautions in Preparing the Research Report
d. Guidelines for Effective Documentation
e. Reference and Citation (APA Style)
f. Ethical Considerations in Research
g. Plagiarism and similarity report
h. AI Tools for research report writing

IV. Course Outcomes

By the end of this course a student will be able to

CO1 Understand the business research process and design
CO2 Identify research gap and define the problem statement
CO3 Develop the tool for data collection
CO4 Evaluate the data and choose appropriate statistical tests
CO5 Create a research report

V. COs - POs - K Levels Matrix

CO<>PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO6	PO7	PO8	K levels
CO 1		3		3			3	2	K2
CO 2		3		3	2		3	2	K3
CO3		3		3	2		3	2	K4
CO 4		3		3	2		3	2	K5
CO 5	2	3		3	2		3	2	K6

VI. Course Materials

a. Mandatory

Chawla, D. & Sondhi, N.(2018). Research Methodology, Concepts and Cases. (2ed.). New Delhi: Vikas Publishing House Pvt. Ltd.

b. Additional

1. Zikmund, W. G., Babin, B. J., Carr, J. C., & Griffin, M. (2013). Business Research Methods. Cengage Learning
2. Cooper, Donald R. & Chindler, Pamela S. (2013). Business Research Methods. (12 ed.). New Delhi: Mc-Graw Hill Education

Core Course

Course Code: 25PBA2117 | Title: Business Communication II | Credits: 2

I. Course Description

This practical course is a follow up of the LSRW skills given as a base in the I semester. In this course the learners would be taught to apply the acquired skills in the business scenario. The focus of the sessions would be to prepare the learner for Corporate. They would also learn the techniques employed conflict management and team communication. Inputs on organizing business meeting, and strengthening connections in diverse workplace would be given. This course would therefore help the learner to prepare themselves for their professional career as leaders.

II. Course Objectives

1. Learn about the flow of information and communication in an organization.
2. Identify the communication strategies to handle conflicts in work place.
3. Acquire the strategies to plan, organise and participate in business meetings.
4. Understand the role of communication in promoting ethical behaviour
5. Equip with the practical communication skills and strategies necessary to effectively navigate the job application and interview process.

III. Course Content

1. **Organizational Communication**
    a. Purpose and Flow of Communication
    b. Process of Communication -The Shannon Weaver Model
    c. Communication Climate – Gibb's Supportive and Defensive Communication Pattern
2. **Specific Communication Needs**
    a. Interpersonal Need Perspective in Organization
    b. Process and Nature of Communication in Conflict
    c. Verbal skills for Communicating in Conflict
3. **Professional Communication**
    a. Dynamics of Business Meeting
    b. Ethical Considerations in Internal Communication
    c. Ethical Persuasion and Influence
4. **Leadership Communication**
    a. Language and Style of Leadership Communication
    b. Communication Pattern for Leaders
    c. Crafting Personal Brand
5. **Communication for Interview**
    a. Resume
    b. Self-Introduction
    c. Group Discussion
    d. Online Interview Techniques

V. Course Outcome:

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

CO1 Describe the flow of information and communication in an organization
CO2 Apply effective communication strategies to build and maintain positive interpersonal relationships and manage conflicts constructively in various professional settings.
CO3 Conduct and participate in productive business meetings, demonstrating an understanding of meeting dynamics and adhering to ethical standards in business communication.
CO4 Demonstrate key soft skills and utilize effective language patterns to influence and inspire others in leadership roles.
CO5 Create strong resumes, give good introductions, participate well in group discussions, and use smart interview techniques to get placements

V. COs - POs - K Levels Matrix

CO<>PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO6	PO7	PO8	K levels
CO 1				3					K2
CO 2		2	3						K5
CO3			3	3		3			K4
CO4			3	3					K3
CO5	3							1	K6

VI. Course Materials

a. **Mandatory Book**:
Chaturvedi, P. D. (2024). Business Communication - Skills, concepts and Applications. Noida UP: Pearson India Education Services Pvt. Ltd.

CORE COURSE

Semester III

Core Course

Course Code: 25PBA3118 | Title: Global Strategy | Credits: 3

I. Course Description:

The course exposes the students to the concepts and tools of strategy formulation and execution. The course explores the methods and tools used for scanning internal and external environment. The course takes a general management perspective and examines how functional strategies are integrated for building a sustained competitive advantage vis-a-vis competition at Indian and global level perspectives .

II. Course Objectives

1. To understand the strategic management process
2. To apply tools and evaluate the opportunities and threats of firms externally.
3. To apply and evaluate resources and capabilities of the firm
4. To evaluate and create strategies at a functional level of the business.
5. To create strategies at a business, corporate including global level for competitive advantages

III. Course Content

1. **Strategic Management - Process**
   a. Strategic Management Process
   b. Business Models
   c. Vision/Mission and strategic intent.
2. **External Environment**
   a. Understanding key external environments
   b. Tools for scanning
   c. Interpretation and its use in strategy formulation
3. **Internal Environment**
   a. Appraising Organizations
   b. Internal environment dynamics – capability factors
   c. Techniques for Assessment and assessment.
4. **Building Strategies**
   a. Functional level
   b. Business level
   c. Corporate level/Global level corporate strategies.

5. **Corporate Strategies**
   a. Corporate level
   b. Analyze competitive advantage and building sustainable strategy
   c. Multi-business models for a global and local environment – AI's influence in strategy making.

IV. Course Outcomes

By the end of this course a student will be able to

CO1 Understand the strategic management process

CO2 Analyze the external environment using appropriate models for strategic formulation

CO3 Evaluate the internal environment of a firm

CO4 Examine the functional and business level strategies

CO5 Create sustainable competitive srategy for companies at a national and global level.

V. COs - POs - K Levels Matrix

CO<>PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO6	PO7	PO8	K level
CO 1		3		3	3			3	K2
CO 2		3	3	3	3			3	K4
CO3		3	3	3	3	3		3	K5
CO 4		3	3	3	3	3		3	K4
CO 5		3	3	3	3	3		3	K6

VI. Course Materials

a. Mandatory

Hill, C. W. L., Schilling, M. A., & Jones, G. R. (2023). *Strategic management: Theory & cases: An integrated approach* (14th ed.). Cengage Learning.

b. Additional

HBR's must reads on Strategy, Harvard Business Review, Boston.

Finance

Electives

Semester III

Elective Course

Course Code : 25PBA3101 | Title: Security Analysis and Portfolio Management | Credits:4

I. Course Description

This course is an in-depth study of Security Analysis and Portfolio Management. Students will first develop a strong theoretical knowledge of asset pricing and market efficiency. Students will then be exposed to the analysis of securities, industries, companies and economy of the select country to apply their theoretical knowledge to understand the process of developing, managing and evaluating Portfolio. In addition, students will practically develop an Investment Policy Statement (or a Statement of Advice) for an investor, forecast characteristics of various asset classes in an economy, and be able to create an investment portfolio to satisfy investors' needs.

II. Course objectives

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

- Understand the fundamental concepts of investment, speculation, financial markets, and stock exchanges.
- Analyze security valuation using fundamental and technical analysis techniques.
- Evaluate portfolio risk and return using models such as CAPM, CML, and SML.
- Apply portfolio theories, including Efficient Market Hypothesis and Markowitz Optimization, for investment decisions.
- Create effective portfolio management strategies through performance evaluation, active/passive management, and portfolio revision.

III. Course Content

1. Basic concepts of investment

a. Investment Vs Speculation
b. Investment Alternatives
c. New Issue Market, Secondary Market, Listing of Securities
d. BSE, NSE, OCTEI
e. International Stock Market Indices
f. AI-driven sentiment analysis, predictive analytics in financial markets

2. Security Analysis

a. Fundamental Analysis
b. Technical Analysis
c. **AI-Driven Fundamental & Technical Analysis**

3.Portfolio Risk and Return Analysis

a. Portfolio Risk Exposures
b. Portfolio Risk Return
c. Capital Asset Pricing Model
d. Capital Market Line
e. Security Market Line
f. AI-driven volatility forecasting and risk mitigation

4.Portfolio Theories

a. Efficient Market Theory
b. Random Walk Theory
c. Markowitz Portfolio Optimization

d. AI-powered asset allocation, reinforcement learning for portfolio optimization

5.Portfolio Management

a. Portfolio Performance evaluation
b. Active and Passive management
c. Revision of Portfolio
d. **R**obo-advisory systems, algorithmic trading, AI-based rebalancing strategies

IV. Course Outcomes

By the end of this course a student will be able to:

CO1 Explain key investment concepts, differentiate between investment and speculation, and describe the structure of financial markets.

CO2 Assess security values using fundamental and technical analysis techniques.

CO3 Compute portfolio risk and return, and apply asset pricing models such as CAPM, CML, and SML for investment decision-making.

CO4 Analyze portfolio theories, including the Efficient Market Hypothesis and Markowitz Portfolio Optimization, to optimize investments.

CO5 Design an optimal portfolio management strategy by integrating risk assessment, performance evaluation, and portfolio revision techniques.

V. COs - POs - K Levels Matrix

CO<>PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO6	PO7	PO8	K levels
CO 1	3	3		3					K2
CO 2		3		3					K6
CO3		3		3			1		K2
CO 4		3		3					K5
CO 5		3		3	1		2		K5

VI. Course Materials

a. Mandatory

Prasanna Chandra. (2021). Investment analysis and portfolio management. (6 ed.) New Delhi: McGraw-Hill Professional.

b. Additional

Ranganatham M. & Madhumathi R. (2012). Security analysis and portfolio management. (2 ed.) New Delhi: Pearson.

Elective Course

Course Code : 25PBA3102 | Title: Financial Services | Credits: 4

I. Course Description

This course provides a comprehensive understanding of mutual funds and insurance, covering their concepts, regulations, investment strategies, and risk management. Students will learn about mutual fund schemes, investor transactions, financial planning, general and life insurance products, along with their taxation and regulatory aspects.

II. Course Objectives

1. To Understand the fundamentals, role, and regulatory framework of mutual funds.
2. To Explore different mutual fund schemes, their risks, and taxation aspects.
3. To Learn about investor transactions, financial planning, and portfolio management.
4. To Gain knowledge on trade finance and forex
5. To Understand insurance products, policy servicing, and taxation benefits.

III. Course Content

1. **Understanding Mutual Funds & Regulatory Framework**
   a. Concept & Role of Mutual Funds
   b. Legal & Regulatory Framework
   c. Fund Distribution & Sales Practices
2. **Mutual Fund Schemes, Performance & Taxation**
   a. Scheme-Related Information
   b. Performance Evaluation & Risk Assessment
   c. Taxation Aspects of Mutual Funds
   d. AI – Based Mutual fund Analysis
3. **Investor Services, Transactions & Financial Planning**
   a. Investor Transactions & Services
   b. Investment Planning & Portfolio Management
4. **Trade Finance and Forex**
   a. Letter of Credit
   b. Bills Discounting
   c. Basics of Forex
5. **Insurance**
   a. Fundamentals of Life and General Insurance

b. Types of Products
c. Regulatory Framework and Claim Process

IV. Course Outcomes

By the end of this course a student will be able to

CO1: Explain the basic concepts, role, and regulations of mutual funds.

CO2: Analyze different mutual fund schemes, assess their risks, and understand their taxation aspects

CO3: Apply financial planning techniques and manage investor transactions in mutual funds.

CO4: Explain the concepts of Trade finance and forex.

CO5: Compare various insurance products, their taxation benefits, and policy servicing processes.

V. COs - POs - K Levels Matrix

CO<>PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	K levels
CO1		3	3	3		3			K2
CO2		3	3	3					K4
CO3		3	3	3		3			K3
CO4		3	3	3					K5
CO5		3	3	3					K5

VI. Course Materials

a. Mandatory

1. Fredman & Wiles. (2004). *How mutual funds work.* (2nd ed.). Prentice Hall India.
2. **Das, S. C.** (2019). *Insurance Management* (2nd ed.). Prentice Hall India.

b. Additional

1. Sankaran, S. (2018). *Indian Mutual Funds Handbook: A Guide for Industry Professionals and Intelligent Investors* (5th ed.). Vision Books.
2. National Institute of Securities Markets (2020). *Fundamentals of Mutual Funds* NISM Series V-A & V-B
3. Insurance Regulatory and Development Authority of India (IRDAI). (2021). *Introduction to Insurance* IRDAI.

Elective Course

Course Code: 25PBA3103 | Title: Banking Services and Fintech Applications | Credits: 4

I. Course Description

This course aims at giving an overall understanding of the modern banking services, digital banking and Fintech in banking services. The course gives a basic insight about banking operations, banking financial statements, regulatory frameworks and acquaint the learners with various digital banking services and application of FinTech and Block Chain in banking services.

II. Course Objectives

1. To equip students with a comprehensive understanding of the banking industry, its functions, and the various services it offers
2. To provide students with a thorough understanding of financial statements specific to banks and the regulatory framework.
3. To apply the knowledge of anti-money laundering and know your customer.
4. To equip students with the knowledge and skills necessary to navigate the digital transformation in the banking industry.
5. To provide students with a comprehensive understanding of the FinTech and Block Chain Technology in banking industry.

III. Course Content

1. **Banking Services**
   a. Origin and growth of Banking, Functions of Commercial Banking
   b. Banker Customer Relationship
   c. Retail Products and Channels
   d. Bancassurance
   e. Small and payment banks
2. **Bank's Financials and Basel Framework**
   a. Balance Sheet and Income Statement
   b. CAMELS framework
   c. Non-Performing Asset categories and Provisioning Norms
   d. Basel Accords
   e. Asset Liability Committees
3. **Anti-money Laundering (AML) and Know Your Customer (KYC)**
   a. Origin of AML, Techniques of AML, Impact on banks, Preventive measures,
   b. International cooperation of AML and Regulatory frameworks of AML
   c. KYC policies, KYC customer profiling, KYC regulatory guidelines
   d. Monitoring suspicious transactions especially with a focus on RBI prescriptions.
4. **Digital Banking Services**
   a. Internet Banking
   b. Mobile Banking and apps

c. Central Bank Digital Currency
d. AI in Banking

5. **Fintech in Banking Industry**
   a. Digital transformation of banks in India
   b. Banking and beyond with Block Chain Technology

IV. Course Outcomes

By the end of this course a student will be able to

CO1 Summarize the function, importance and services provided by banks

CO2 Interpret the regulatory framework governing the banking industry

CO3 Evaluate the functions and application of Anti-money Laundering and Know Your customer

CO4 Analyse the impact of technological advancements on banking services

CO5 Utilize the applications of Financial Technology (FinTech) and Block Chain in banking industry

V. COs - POs - K Levels Matrix

CO<>PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	K levels
CO1		3	3	3		3			K2
CO2		3	3	3					K5
CO3		3	3	3		3			K5
CO4		3	3	3					K4
CO5		3	3	3					K3

V. Course Materials

a. Mandatory

Gurusamy, S.(2009). Merchant banking and financial services. (3rd ed.). Tata McGraw – Hill.

Raj Singh (2019) Artificial Intelligence In Banking & Finance: How AI is Impacting the Dynamics of Financial Services. Adhyyan Books

b. Additional

Sankaran, S. (2011). NCFM- Banking sector module. National Stock Exchange of India Ltd. Khan,

M.Y. (2017). Financial services. (8 ed.). Tata McGraw – Hill.

Abhishek Gupta , Dwijendra Nath Dwivedi , Jigar Shah (2023). Artificial Intelligence Applications in Banking and Financial Services. Springer Singapore

Elective Course

Course Code: 25PBA3104 | Title: Accounting Analytics | Credits: 4

I. Course Description

This course familiarizes the students to understand the ratios and accounting based valuation. The course focuses on comprehensive learning in earnings management, on analytic techniques for decision making involving Discretionary Accruals Models and Prediction Models. It enables the students to analyze linking Non-Financial Metrics to Financial Performance.

II. Course Objectives

1. To understand the basic concepts related to accounting ratios.
2. To enhance the understanding in Earnings Management.
3. To apply discretionary accruals models to estimate discretionary accruals.
4. To be competent on Fraud Analytics, Big Data and Prediction Models.
5. To analyze and evaluate linking Non-Financial Metrics to the performance of companies

III. Course Content

1. Ratios and Forecasting

a. DuPont analysis
b. Profitability, Turnover ratios & Liquidity ratios
c. Comparative & Common Size Financial Statements
d. Trend analysis - Forecasting Financial Statements

2. Earnings Management

a. Overview of Earnings management
b. Revenue recognition: Before and after cash collection
c. Expense recognition: Capitalizing vs. Expensing
d. Expense recognition: Reserve accounts and write-offs

3. Prediction Models

a. Fraudulent Financial Statements
b. Fraud Prediction Models
c. Beneish M-Score
d. Benford'sLaw -Primary Benford Law test
e. Financial Statements detecting discrepancies from Benford's Law
f. Asset quality index (AQI), Sales growth index (SGI), Depreciation index (DEPI)

4. Linking Non-Financial Metrics to Financial Performance

a. Linking Nonfinancial Performance to Financial Results
b. Key Component of Managerial Decision-Making
c. Selecting performance measures for evaluating managerial and business performance
d. Informal data analyses
e. Linking Nonfinancial and Financial Results in Business Models

5. **Linking Non-Financial Metrics to Financial Performance**
   a. Linking Nonfinancial Performance to Financial Results
   b. Key Component of Managerial Decision-Making
   c. Selecting performance measures for evaluating managerial and business performance
   d. Informal data analyses
   e. Linking Nonfinancial and Financial Results in Business Models

IV. Course Outcomes

By the end of this course a student will be able to

CO1 Analyze trends and patterns in accounting ratios over time

CO2 Apply knowledge of earnings management techniques

CO3 Analyze financial data to assess the quality of earnings using discretionary accruals models.

CO4 Assess the impact of big data analytics and prediction models on business processes, decision-making, and organizational performance

CO5 Evaluate the effectiveness of non-financial metrics in predicting and explaining variations in financial performance metrics

V. COs - POs - K Levels Matrix

CO<>PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO6	PO7	PO8	K levels
CO 1		**3**		**3**				**3**	K4
CO 2		**3**		**3**				3	K3
CO3		**3**		**3**				**3**	K4
CO 4		**3**		**3**				**3**	K5
CO 5		**3**		3				**3**	K5

VI. Course Materials

a. Mandatory

Godwin, N., Alderman, W., & Sanyal, D. (2016). *Financial ACCT: A South-Asian Perspective.* (2nd ed.). Cengage.

b. Additional

Materials will be provided for the course by the course coordinator

Marketing

Electives

Semester III

Elective Course

Course Code: 25PBA3201 | Title: Product and Brand Management | Credits: 4

I. Course Description

This course exposes the students to the process involved in product development – commercially. The key steps involved in product development and the tools used for a go-to-market strategy are discussed in full length. The course also gives a basic framework on Brand and its Management- from product to a brand and its leveraging capacities.

II. Course Objectives

1. To understand the various stages in product development.
2. To analyse the challenges faced from planning to execution of marketing communication.
3. To apply and evaluate the different mediums of marketing communication.
4. To examine the different stages of brand management.
5. To create strategies for managing brands.

III. Course Content

1. **Product Development**
   a. Customer Journey
   b. Product Life Cycle
   c. Product Discovery
   d. Stages product development
   e. Integrating AI in product discovery and development process
2. **Consumer Behavior and Big Idea**
   a. Consumer Behavior Models
   b. AI for understanding consumer Psychology
   c. Design Thinking
   d. Big Idea – Development
   e. IMC strategy
3. **Communication in different mediums**
   a. Print – Layouts and other key principles for communication through print
   b. TV – Channels and relevant process
   c. Digital Marketing
   d. Other mass media methods of communication
   e. Metrics for decision making
4. **Basics of Branding**
   a. Product to Brand
   b. Fundamentals of branding
   c. Brand architecture
   d. Brand models
   e. Brand audit

5. **Strategic Brand Management**
   a. Brand Positioning
   b. Brand – Strategy, Planning and Profitability
   c. Brand Analysis
   d. Growing and Sustaining Brands
   e. Brand Loyalty and Equity

IV. Course Outcomes

By the end of this course a student will be able to

CO1 Understand the various stages involved in new product development, including essential elements and commercial considerations

CO2 Develop the big idea using design thinking principles

CO3 Analyse the use of mass media methods of communication for promotion CO4 Understand the fundamentals of branding.

CO5 Formulate innovative strategies for effective brand management in a competitive market.

V. COs - POs - K Levels Matrix

CO<>PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO6	PO7	PO8	K levels
CO 1		3		3				2	K2
CO 2		3	3	3			3	2	K6
CO3		3		3	3		3	2	K4
CO4		3	**3**	3	3			2	K2
CO5		3		3				2	K6

VI. Course Materials

a. Mandatory

Shah, K. (2017). *Advertising and integrated marketing communications.* McGraw Hill.

b. Additional

1. Belch, G. E., & Belch, M. A. (2017). *Advertising and promotion: An integrated marketing communications perspective* (11th ed.). McGraw-Hill Education.

2. Marc, A. & Annachino, P.E. (2006). New product development: From initial idea to product management. Elsevier.

3. www.afaqs.com

4. www.mediaant.com

5. www.exchange4media.com

Elective Course

Course Code: 25PBA3202 | Title: Services Marketing | Credits: 4

I. Course Description

This course helps to understand the nature and scope of services marketing. It deals with the unique challenges in developing and managing quality service. The tools and strategies to address these challenges are dealt.

II. Course Objectives

1. To understand the unique challenges in marketing of services
2. To understand the dimensions of service quality and the various gaps that can occur during service delivery
3. To learn service standards, service design and distribution of services
4. To analyse employees' role and customers' role in service delivery
5. To develop strategies to match demand and supply of services and pricing

III. Course Content

1. **Foundations for Services Marketing**
   a. Service Sector and Indian Economy
   b. Unique Characteristics of Services
   c. Classification of Services and Service Adjuncts
   d. Services Marketing Mix
   e. AI in Services
2. **Focus on the Customer**
   a. GAPS Model of Service Quality and Dimensions
   b. Understanding Consumer Expectations using AI
   c. Customer Perceptions of Service
   d. Consumer Research in Services
   e. Service Encounters
3. **Service Standards, Design and Distribution**
   a. Service Standards
   b. Designing Services using AI
   c. Physical Evidence and the Servicescape
   d. Distribution
   e. Role of Intermediaries and Electronic Channels
4. **Delivering and Performing Service**
   a. Role of Employees in Service Delivery
   b. Role of Customers in Service Delivery
   c. Self Service Technologies
   d. Strategies for Enhancing Customer Participation
   e. Enhancing Service Delivery using AI

5. **Managing Service Promises**
   a. Managing Demand and Supply
   b. Pricing Strategies
   c. Yield Management
   d. Customer Retention
   e. Complaints Handling and Service Recovery

IV. Course Outcomes

By the end of this course a student will be able to

CO1 Understand the unique characteristics of services, challenges and opportunities for marketing services

CO2 Apply customer-centric models to enhance service quality dimensions, customer expectations, and perceptions.

CO3 Analyze the service standards, considering physical evidence, servicescape and distribution strategies.

CO4 Assess the role of employees and customers in service delivery CO5 Develop effective strategies for demand and supply management

V. COs - POs - K Levels Matrix

CO<>PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO6	PO7	PO8	K levels
CO 1		3							K2
CO 2		3	3	3			3	3	K3
CO3		3		3	3			3	K4
CO4	**3**	3	**3**	3			3	3	K5
CO5		3		3				3	K6

VI. Course Materials

a. Mandatory

Zeithaml, V.A., Bitner, M.J., Gremler, D.D. (2018). Services marketing – Integrating customer focus across the firm. (7 ed.). New Delhi, India: McGraw Hill Education (India) Pvt. Ltd.

b. Additional

Bateson E.G. J., & Hoffman K. D. (2011). Services Marketing (4 ed.). New Delhi, India: Cengage Learning India Private Limited.

Elective Course

Course Code: 25PBA3203 | Title: Digital Marketing | Credits: 4

I. Course Description

The course is designed to make the students to gain knowledge and skills in digital marketing.

It covers search engine optimization, website analytics, search and display ads, email marketing, social media, and social listening.

II. Course Objectives

1. To understand the online environment and devise strategies for establishing a digital presence
2. To apply Search Engine Optimization techniques for both on-site and off-site
3. To know the process of content and email marketing
4. To learn Social Media Marketing strategies and engage in social networks
5. To assess the various formats of online advertising

III. Course Content

1. Online Environment

a. Getting started online
b. Developing online presence
c. B2C online presence
d. B2B online presence
e. E-commerce strategies

2. Search Engine Optimization

a. Search engine
b. Keyword selection
c. On-site optimization
d. Off-site optimization
e. Paid search

3. Content and Email Marketing

a. Content marketing
b. Content types
c. Data – Email Marketing Process
d. Design and Content
e. Delivery and Discovery

4. Social Media Marketing

a. Social networks and online communities
b. Blogging
c. Viral marketing
d. Social media analytics
e. Influencer marketing

5. Online Advertising

a. Online ad formats
b. Search engine advertising
c. Network advertising
d. Affiliate programmes
e. Landing pages

IV. Course Outcomes

CO1 Understand the online environment and digital marketing principles CO2 Apply effective SEO strategies for on-site and off-site optimization CO3 Develop content marketing and email marketing campaigns
CO4 Apply strategies for effective Social Media Marketing
CO5 Evaluate online advertising formats and channels for effective digital marketing campaigns

V. COs - POs - K Levels Matrix

CO<>PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO6	PO7	PO8	K Levels
CO 1		2		3					K2
CO 2		3		3					K3
CO3	2	3		3					K6
CO 4		3		3			3	2	K3
CO 5		3		3			3	2	K5

VI. Course Materials

a. Mandatory

Ryan, D. (2017). Understanding digital marketing: Marketing strategies for engaging the digital generation. (4th ed.). Kogan Page Limited.

b. Additional

1. Stokes, R. (2013). The essential guide to marketing in a digital world. (5th ed.). Quirke Marketing.
2. Charlesworth, A. (2014). Digital marketing: A practical approach. (2nd ed.). Routledge.
3. Bhatia, P.S. (2019). Fundamentals of digital marketing. (2nd ed.). Pearson India Education Services Pvt. Ltd.

Elective Course

Course Code: 25PBA3204| Title: Business to Business Marketing| Credits: 4

I. Course Description

This course gives a strong knowledge base to the students' in the area of Business to Business (B2B) marketing. Students understand the elements of marketing function from a B2B perspective. It covers the entire gamut of B2B function; starting from understanding industrial buyers to channel management to customer relationship management.

II. Course Objectives

1. To understand the key principles, characteristics, and challenges of B2B marketing.
2. To analyze strategic approaches to market segmentation, targeting, and positioning in B2B markets.
3. To evaluate product development, pricing strategies, and negotiation techniques in industrial markets.
4. To explore the role of digital platforms, e-commerce, and supply chain management in B2B marketing channels.
5. To develop effective sales communication and relationship management strategies, considering ethical and legal aspects.

III. Course Content

1. Fundamentals of B2B Marketing

a. Understanding Business Markets vs. Consumer Markets
b. Characteristics of B2B Demand and Buying Behavior
c. Organizational Buying Process and Decision-Making Units (DMUs)
d. Key Trends and Challenges in B2B Marketing

2. Business Marketing Strategy and Market Segmentation

a. Strategic Planning in Business Markets
b. Segmenting B2B Markets: Approaches and Criteria
c. Targeting and Positioning in Business Markets
d. Managing Customer Relationships and Key Account Management

3. B2B Product and Pricing Strategies

a. Product Development and Innovation in B2B Markets
b. Managing Industrial Product Lines and Services
c. Pricing Strategies and Value-Based Pricing in B2B
d. Negotiation and Pricing Challenges in Business Markets

4. B2B Marketing Channels and Digital Transformation

a. Designing and Managing B2B Distribution Channels
b. Role of E-Commerce and Digital Platforms in B2B Marketing
c. Logistics and Supply Chain Management in B2B Markets
d. Impact of Digitalization and Emerging Technologies

5. Sales, Communication, and Relationship Management in B2B

a. Role of Personal Selling and Sales Force Management
b. Integrated Marketing Communications for B2B Markets
c. Customer Retention and Relationship Marketing
d. Ethical and Legal Aspects in B2B Marketing

IV. Course Outcomes

By the end of this course a student will be able to

CO1 Understand the fundamental concepts and characteristics of B2B marketing
CO2 Students will be able to analyse market segmentation and strategic planning techniques to create competitive B2B marketing strategies.
CO3 Evaluate product and pricing strategies for B2B transactions
CO4 Students will be able to analyze and leverage digital transformation tools in B2B distribution and logistics management.
CO5 Students will be able to develop effective sales, communication, and customer relationship management strategies for B2B markets.

V. COs - POs - K Levels Matrix

CO<>PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	K Levels
CO1		3		3				2	K2
CO2		3		3				2	K4
CO3		3	3	3				2	K5
CO4	2	3		3			3	2	K6
CO5		3		3	3	3		2	K5

V. Course Materials

a. Mandatory

Hutt, D.M., Sharma, D., & Speh, W. T. (2017). *B2B marketing: A South-Asian perspective*. (11th ed.). Cengage Learning.

b. Additional

Cases and articles related to B2B will be given by the Professor at the start of the course.

Human Resources

Electives

Semester III

Elective Course

Course Code: 25PBA3301 | Title: Talent Acquisition | Credits: 4

I. Course Description

The course focuses on the importance of talent acquisition in driving organizational success. It describes the key steps and components of the talent acquisition process.

II. Course Objectives

1. To know the different approaches and philosophies of talent acquisition
2. To understand the recruitment strategies and processes
3. To recognise the process and procedures of selection
4. To learn to conduct interviews
5. To comprehend onboarding programs for new hires into the organization

III. Course Content

1. Changing Business Context in Recruitment and Selection

a. Philosophy of Talent Acquisition
b. Job Analysis, Job requirement
c. Competency-based job analysis methods
d. Reward based job analysis methods.

2. Recruitment

a. Planning
b. Strategy development
c. Searching, and applicant reactions
d. E-recruitment process
e. AI integration in recruitment

3. Selection

a. Process
b. Validity of selection tools
c. Selection tests
d. AI for selection process

4. Interviews

a. Types
b. Planning
c. Conducting interview
d. Online interviews
e. AI enabled interviews

5. Placement and Induction

a. Objectives, needs and roles
b. Online Induction
c. Online training modules

IV. Course Outcomes

The students will be able to learn

CO1 Understand the philosophy of talent acquisition.
CO2 Develop a recruitment strategy that is aligned with organisational objectives.
CO3 Analyse the various selection tools
CO4. Design the process and techniques in structuring the interview
CO5. Evaluate the placement and induction strategies

V. COs - POs - K Levels Matrix

CO<>PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO6	PO7	PO8	K level
CO 1		**3**	**3**	**3**					**K2**
CO 2	**3**	**3**	**3**	**3**					K6
CO3		**3**	**3**	**3**		**3**			**K4**
CO4		**3**	**3**	**3**	**2**				**K6**
CO5	**3**	**3**	**3**	**3**	**2**			**3**	**K5**

VI. Course Materials

a. Textbook

Human Resource Selection: Gatewood, Field and Barrick, Cengage Learning
Sahay, P. (2015). A strategic approach to talent acquisition. Create Space Independent Publishing platform.

b. Reference

1. Ariss, A.A. (2014). Global talent management: Challenges, strategies, and opportunities. (1sted.). Springer Publications.
2. Arthur, D. (2011). Recruiting, interviewing, selecting and orienting new employees (4th ed.). PHI Learning Private Limited

Elective Course

Course Code: 25PBA3302| Title: Performance and Compensation Management| Credits: 3

I. Course Description

This course familiarizes the students with performance management process and components of compensation system followed in different institutions.

II. Course objectives

1. To understand the performance management system
2. To know the metrics of performance management
3. To evaluate the different performance measurements
4. To illustrate the compensation structure and differentials
5. To understand the different types of wage incentives

III. Course Content

I. Performance Management

a. Performance Management as a system
b. Performance Domains, Dimensions, Role Analysis
c. Evaluating Performance Management

2. Performance Management (PM) Process and System

a. PM planning& process
b. Key performance indicators (KPI)/Metrics
c. Performance Management system
d. Measuring results and behaviour
e. Performance accounting and audit
f. Ethical and legal issues of PM

3. Performance measurements

a. Appraisal Forms and Formats
b. Appraisal Communication, Appraisal Interview, Feedback and Counselling
c. Errors in appraisal, and reduction of errors
d. Balance score card
e. HR score card
f. Employee Net Promoter Score (ENPS)

4. Compensation management

a. Introduction to Compensation and Rewards
b. Objective of Compensation and Rewards
c. Framework of Compensation Policy
d. Labour market characteristics

5. Wage Incentives

a. Wage Incentives in India
b. Cafeteria Style of Compensation
c. ESOP (Employee Stock Option Plan)
d. Executive compensation
e. Fringe Benefits
f. Tax Planning

IV. Course Outcomes

Completion of this course, students will be able to:

CO1 Outline the importance of performance management system

CO2 Analyse the various performance metrics.

CO3 Evaluate the different performance measurements

CO4 Illustrate the compensation structure and differentials.

CO5 Analyse the various types of wage incentives

V. COs - POs - K Levels Matrix

CO<>PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO6	PO7	PO8	K level
CO 1		3		3					K2
CO 2		3	3	3	2	3			K4
CO3		3	3	3	2				K5
CO 4		3	3	3	2				K3
CO 5		3	3	3	2				K4

IV. Course Materials

a. Mandatory

Bhattacharyya, D. K. (2011). *Performance management systems and strategies*. Pearson Publications.

Milkovich, G. T., Newman, J.M. & Gerhart, B. (2011). *Compensation*. (10th ed.). Tata McGraw-Hill Education.

b. Additional

Agunis, H. (2016). *Performance management*. (3rd ed.). Pearson Publications.

Goel, D. (2009). *Performance appraisal and compensation management*: A *modern approach*. PHI Learning Pvt. Ltd.

Elective Course

Course Code: 25PBA3303 | Title: Learning and Development | Credits: 4

I. Course Description

This course imparts the skills necessary to design, develop and implement a training program.

II. Course Objectives

1. To understand the fundamental training and learning principles, exploring their theoretical foundations and practical applications.
2. To know the concept of training objectives
3. To understand the insights about developing the training program
4. To learn different training methods, such as lectures, discussions, and hands-on activities, based on learning objectives.
5. To understand the training evaluation and ROI calculation.

III. Course Content

1. Training and Learning Principles

a. Needs assessment and needs analysis
b. Determining whether training is the best solution
c. Andragogy and adult learning theory
d. Characteristics of adult learners
e. Learning outcomes, domains
f. Learning styles, cycle and process
g. Learning theories

2. Training Objectives

a. Setting training goals and objectives
b. Bloom's taxonomy and the three learning domains
c. Writing SMART objectives
d. Training budget

3. Developing the Training Program

a. Program design
b. Content derivation
c. Content sequencing
d. Developing lesson plan

4. Training Methods, Experiential Learning and Technology in Training

a. Training methods
b. Determining the best method of training
c. Using e-learning
d. AI technology-based training
e. Appropriate training design

f. Virtual Facilitation skills
g. Training and Presentation Skills

5. Evaluation and Return on Investment

a. Training evaluation
b. Benefit-cost ratio
c. Link training to organization success

IV. Course Outcomes

Completion of this course, students will be able to:

CO1 Assess the relevance of different learning theories in various educational contexts.
CO2 Develop training objectives and ensure that training objectives are achievable and learner-centric.
CO3 Apply specific skills and knowledge to design and implement effective training programs.
CO4 Analyse the training methods to suit the specific needs and learning styles of participants.
CO5 Develop reports and presentations to communicate training evaluation results and ROI to organizational leaders.

V. COs - POs - K Levels Matrix

CO<>PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO6	PO7	PO8	K levels
CO 1	1		3	3			3		K5
CO 2			2	3					K6
CO3	1		3	3			3		K3
CO 4				3			3	2	K4
CO 5		2	3	3			3		K6

VI. Course Materials

a. Mandatory

Noe, R. (2017). Employee training and development. (9th ed.). McGraw-Hill.

b. Additional

1. Bhattacharya, D.K. (2015). Training and Development. Sage Publication.
2. Planning Tool - Retrieved from https://www.planware.org/strategicplanner.htm
3. Evaluation Model from Businessballs.com:www.businessballs.com/kirkpatricklearningevaluationmodel.html
4. Presentation skills from www.presentationskills.info/presentationskills.htm
5. Bloom's Taxonomy. www.nwlink.com/~donclark/hrd/bloom.html
6. Kolb Learning www.businessballs.com/kolblearningstyles.htm
7. Learning Style test. from www.coe.iup.edu/rjl/instruction/cm150 /self-interpretation/kolb.htm

Elective Course

Course Code: 25PBA3304 | Title: Human Resource for Environmental Sustainability | Credits: 4

I. Course Description

This course explores the role of Human Resource Management (HRM) in driving environmental sustainability within organizations and examines how HR practices can promote eco-friendly policies, sustainable workforce engagement, and green business strategies**.** Key topics include sustainable recruitment, green training and development, environmental performance management, corporate social responsibility (CSR), and ESG compliance**.**

II. Course Objectives

1. Introduce the principles of HR's role in environmental sustainability and corporate eco-strategies.
2. Develop HRM strategies for sustainable recruitment, training, and employee engagement.
3. Analyze the integration of sustainability performance metrics into HR policies.
4. Explore the role of HR in Corporate Social Responsibility (CSR) and Environmental, Social, and Governance (ESG) frameworks**.**
5. Assess challenges, trends, and best practices in sustainable HRM.

III. Course Content

1 Introduction to HR and Environmental Sustainability

a. Definition and significance of Environmental Sustainability in HRM
b. HR's role in sustainable business strategies
c. The Triple Bottom Line (People, Planet, Profit) concept
d. Overview of Environmental, Social, and Governance (ESG) compliance
e. Case studies on HR-driven sustainability initiatives

2. Sustainable Recruitment, Training, and Development

a. Green job descriptions and eco-friendly hiring practices
b. Recruitment strategies for attracting sustainability-focused talent
c. Training programs on environmental awareness and sustainable work practices
d. Employee development in corporate environmental responsibility (CER)
e. Best practices in sustainability training programs

3. Environmental Performance Management and Compensation

a. Sustainability-linked performance appraisal systems
b. Employee incentives and rewards for eco-friendly behaviors
c. Sustainable compensation structures and green HR benefits
d. Measuring employee contributions to environmental sustainability goals
e. HR's role in carbon footprint reduction initiatives

4. Employee Engagement, CSR, and ESG

a. Strategies for fostering green employee engagement and motivation
b. HR's contribution to Corporate Social Responsibility (CSR) initiatives

c. Understanding ESG and its impact on HR policies
d. Social sustainability and ethical workplace practices
e. Sustainable leadership and HR's role in green governance

5. Challenges, Trends, and Future of HR in Environmental Sustainability

a. Barriers to implementing sustainable HRM
b. Role of HR technology, AI, and automation in environmental sustainability
c. Circular economy and sustainable workforce planning
d. Global trends and case studies on sustainable HR practices
e. Future of HR's role in achieving net-zero emissions and green transformation

IV. Course Outcomes

Completion of this course, students will be able to:

CO1 Explain HR's role in environmental sustainability.
CO2 Develop sustainable HR strategies.
CO3 Analyze HR's impact on CSR and ESG compliance.
CO4 Evaluate real-world case studies.
CO5 Apply sustainability frameworks in HR.

V. COs - POs - K Levels Matrix

CO<>PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO6	PO7	PO8	K level
CO 1		3	3	3					K2
CO 2	3	3	3	3					K6
CO3		3	3	3		3			K4
CO4		3	3	3	2				K5
CO5	3	3	3	3	2			3	K3

VI. Course Materials

a. Mandatory

1. Renwick, D. W., Redman, T., & Maguire, S. (2013). *Green Human Resource Management: A Global Perspective.* Routledge.
2. Jackson, S. E., Renwick, D. W., Jabbour, C. J., & Muller-Camen, M. (2011**).** *Sustainability and Human Resource Management: Developing Sustainable Business Organizations.* Springer.

b. Additional

1. Jabbour, C. J. C., & de Sousa Jabbour, A. B. L. (2019). *Strategic Sustainability Management: Environmental and Social Responsibility in Organizations.* Springer.
2. Khan, M. (2021). *ESG and Sustainable Business Practices: A Strategic Approach.* Routledge.
3. Sharma, R., & Gupta, S. (2022). *HR's Role in Corporate Sustainability and Green Governance.* Palgrave Macmillan.

IT & Analytics

Electives

Semester III

Elective Course

Course Code: 25PBA3401 |Title: Machine Learning Using Python | Credits:4

I. Course Description

This course introduces the students to Machine learning techniques with analytical experiments. This course helps the students to learn core set of effective machine learning methods and concepts and apply them to solve business problems.

II. Course Objectives

1. To understand the concepts of machine learning.
2. To demonstrate the supervised techniques
3. To study the different forecasting techniques in Machine Learning
4. To explore the unsupervised learning techniques
5. To apply dimension reduction techniques and digital analytics in Machine Learning

III. Course Content

1. **Machine Learning**
   a. Basics of Data Science
   b. Supervised, unsupervised and reinforcement approach
   c. Business Analytics, Machine Learning, Deep Learning
   d. Generative AI and ML
2. **Supervised Learning**
   a. Bayesian Classification
   b. Decision Tree
   c. Random Forest
   d. Support Vector Machine
   e. K Nearest Neighbour
3. **Forecasting**
   a. Linear, Logistic, Multiple regression
   b. Moving average, Exponential smoothing
   c. Auto Regressive Moving Average
   d. Auto Regressive Integrated Moving Average
4. **Unsupervised Learning**
   a. Hierarchical
   b. Partitioning
   c. K-Mean
5. **Dimension Reduction & Digital Analytics**
   a. Principal Component Analysis
   b. Linear Discriminant Analysis
   c. Advancement in Digital Analytics and MLP
   d. Social Network and stream Analytics

IV. Course Outcomes

By the end of this course a student will be able to

CO1 Understand the concepts of machine learning
CO2 Apply the supervised techniques to solve the problem
CO3 Examine the different forecasting techniques in Machine Learning
CO4 Evaluate the data using unsupervised learning techniques
CO5 Analyse the data using dimension reduction techniques and digital analytics to solve the problem

V. COs - POs - K Levels Matrix

CO<>PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO6	PO7	PO8	K levels
CO 1	2			3			2	1	K2
CO 2	2			3		2	2		K3
CO3	2			3		2	2	2	K4
CO 4	2			3			2		K5
CO 5	2			3			2		K4

VI. Course Materials

a. Mandatory

Pradhan, M. & Kumar, U.D. (2018). *Machine learning using python*. Wiley.

b. Additional

1. Lant, B. (2015). *Machine learning with R.* (2nd ed.). Packt Publishing Ltd.
2. Sebastian, R. & Vahid, M. (2017). *Python machine learning*. (2nd ed.). Packt PublishingLtd.
3. Srinivasaraghavan Anuradha, Joseph Vincy.(2019).*Machine Learning*. Wiely.

Elective Course

Course Code: 25PBA3402 | Title: Structured Query Language | Credits: 4

I. Course Description

In this course deals the concept of data base and highlight the need for RDBMS in the functional areas of business. The course provides knowledge on data models, constraints, functions, and queries in relational database management system.

II. Course Objectives

1. To understand and learn the basics of RDBMS and their usage in the business.
2. To apply the basics programming skills to solve problem using MySQL
3. To learn Operators and build in functions in MySQL
4. To create data base using Constrains, views and joins in SQL
5. To Learn usage of triggers, events and stored procedure

III. Course Content

1. Data Base

a. Basic Concepts
b. Relational Approach
c. Data base Design
d. Data Modelling
e. Normalization
f. Client Server Technology

2. MySQL - Introduction

a. Data Definition Language
b. Data Manipulation Language
c. Data Control Language
d. Data Transaction Language

3. MySQL – Operators and Built-in Functions

a. Arithmetic Operators
b. Comparison Operators
c. Logical Operators
d. Where, Order by and Group by clause
e. String Functions
f. Numeric Functions
g. Date Functions

4. Constraints, Views and Joins in MySQL

a. Not NULL, Unique, Primary
b. Foreign Key, Check, Default key
c. Views and Indexes
d. Joins

5. Triggers, Stored Procedure and Advanced data bases

a. Triggers and its Types
b. Event Life Cycle
c. Stored Procedure Statements
d. Cursors
e. Stored Functions
f. Advanced Data Bases
g. Types of Advanced data bases
h. Document Data bases
i. Key Value and wide Stored data bases
j. Graph Data bases

IV. Course Outcomes

By the end of this course a student will be able to

CO1 Understanding of the basics of Relational Database Management Systems
CO2 Apply fundamental programming skills using SQL, enabling them to solve problems
CO3 Apply built in functions
CO4 Evaluate databases using constraints and constraints
CO5 Create data bases using triggers and stored procedure

V. COs - POs - K Levels Matrix

CO<>PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO6	PO7	PO8	K levels
CO 1	2			3			2		K2
CO 2	2			3				2	K3
CO3	2			3			2		K4
CO4				3			2	2	K5
CO5	2			3			2	2	K6

VI. Course Materials

a. Mandatory

1. Vikram Vaswani (2017). *MySQL: The Complete Reference*. McGraw Hill Education.

b. Additional

1. Koundinya Suripeddi. (2022). *SQL in MySQL: Learn and Practice*. Nation Press.
2. Grippa Vinicius M. Kuzmichev Sergey (2021*). Learning MySQL: Get a Handle on Your Data.*(2nd Ed.).O'Reilly.

Elective Course

Course Code: 25PBA3403 | Title: Big Data Analytics | Credits:4

I. Course Description

This course introduces the students to learn the big data analytics and their architectures. This course also deals various analytical techniques to analyze the structured, semi structured and unstructured data.

II. Course Objectives

1. To understand the concepts of big data and types of data
2. To Learn usage of various components of big data management
3. To understand non-relational databases and semi structured, unstructured data
4. To apply the various web sentiment analytics to solve business problems
5. To study the techniques to solve the problems using Natural Language Processing

III. Course Content

1. Big Data Analytics

a. Concepts
b. Types of Big Data
c. Virtualization
d. Components of Big Data Technology
e. Distributed storage systems
f. Row and column store

2. Big Data Management

a. Linux, Apache, MySQL, PHP
b. Scale in and Scale out Architecture
c. Map Reduce
d. Hadoop Conceptual frame work
e. Operational Data Warehousing and Data Cube
f. Extraction, Transformation, Loading
g. Big Data warehouses

3. Web and Text Mining

a. Web Content, Structure, Usage Mining
b. Text Identification, Mining
c. Categorization, Clustering
d. Automatic text Summarization
e. Review Analytics

4. Web Sentiment Analytics

a. Sentiment Classification
b. Word, Sentence, Document, Features Level sentiment

c. Sentiment Lexicon Generation
d. Opinion Summarization

5. Natural Language Processing

a. Linguistic Approach
a. Morphological Analysis, Phonology
b. Tokenization, Stemming, Lemmatization
c. Part of speech tagging
d. Syntactic and Semantic representation
e. Parsing Techniques
f. Models in NLP
g. Generative AI and NLP

IV. Course Outcomes

By the end of this course a student will be able to

CO1 Understand the concepts of big data and types of data.

CO2 Apply the various components of big data management

CO3 Examine the non-relational databases and semi structured, unstructured data

CO4 Analyze the data using the various web sentiment analytics techniques to solve business problems.

CO5 Evaluate the techniques to solve the problems using Natural Language Processing.

V. COs - POs - K Levels Matrix

CO<>PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO6	PO7	PO8	K levels
CO 1	2	2		3			2		K2
CO 2	2	1	2	3		2		3	K3
CO3	2	2		3		2	2		K4
CO 4	2	1		3			2	1	K4
CO 5	2	2		3		2	2	1	K5

VI. Course Materials

a. Mandatory

1. Kamal Raj., Saxena Preeti. (2019). *Big Data Analytics : Introduction to Hadoop,Spark and Machine Learning*. McGraw Hill Education Private Limited.

b. Additional

1. Soumendra, M., Jagadeesh, M., & Srivatsa, H. (2013). *Big data imperatives – Enterprisebig data warehousing, BI implementations and analytics*. (1st ed.). A Press.
2. Vajjala Sowmya.Majumder Bodhisattwa, Gupta Anuj (2020). *Practical Natural Language*
3. *Processing: A Comprehensive Guide to Building Real-World Nlp Systems*.O'Reilly Media.

Elective Course

Course Code:25PBA3404 | Title: Software Development and Project Management | Credits: 4

I. Course Description

This course gives an overview of Software Development Life Cycle and Project Management and introduces the students to different methods, approaches and process of software development.

II. Course Objectives

1. To explain the concept and process of software engineering
2. To discuss the basics of project management
3. To apply the various methods for Project scheduling
4. To examine the various methods of monitoring and control systems
5. To learn software quality and configuration management

III. Course Content

1. **Software Process**
   a. The Software Process Models
   b. The Linear Sequential Model
   c. Prototyping Model
   d. The Rapid Application Development Model
   e. The Evolutionary Software Process Models
   f. Agile Modeling
2. **Project Management Concepts**
   a. People, Product, Process, Project
   b. Measure, Metrics, Indicators
   c. Software cost estimation
   d. LOC and Function points
3. **Project Scheduling**
   a. Preparing Project scheduling
   b. Documenting a Plan
   c. Project Plan review and Execution
   d. Monitoring and Controlling
   e. Scheduling Work Breakdown Structure
   f. Common Process Framework
4. **Monitoring and Control**
   a. SCRUM
   b. Earned Value Management
   c. Metrics for error tracking
   d. Project Review

e. Software Testing
f. Test Case Design
g. White box and Black Box Testing
h. Integration and unit Testing

5. Software Quality and Configuration Management

a. Software quality Attributes
b. Metrics and Indicators
c. Quality standards and Certifications.
d. Baselines Plan for change
e. change request Management
f. Risk management Process

IV. Course Outcomes

By the end of this course a student will be able to

CO1 Understand the concept and process of software engineering

CO2 Explain the basics of project management

CO3 Apply the various methods for project scheduling

CO4 Analyse the monitoring and control systems of software testing

CO5 Examine software quality and configuration management in software industry

V. COs - POs - K Levels Matrix

CO<>PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO6	PO7	PO8	K levels
CO 1	2	2		3			2		K3
CO 2	2	1	2	3		2		3	K3
CO3	2	2		3		2	2		K3
CO 4	2	1		3			2	1	K4
CO 5	2	2		3		2	2	1	K5

VI. Course Materials

a. Mandatory

1. Pressman, R.S. (2019). *Software engineering: A practitioner's approach*. (9th ed.). McGraw Hill Education.
2. Hughes, M. Cotterell, R. Mall (2017). Software Project Management, 6th edition, McGraw Hill Education.

b. Additional

1. Sommerville, I. (2016). *Software engineering.* (10th ed.). Pearson Education.
2. P. Jalote (2026). Software Project management In Practices, Pearson Education India.

Supply Chain Management

Electives

Semester III

Elective Course

Course Code: 25PBA3501 | Title: Techniques for Demand Forecasting | Credits: 4

I. Course Description

This course aims to provide the students an in-depth knowledge on analyzing data for solving supply chain management problems. It helps the students to learn to forecast demand for supply chain and create supply chain model through a scientific process.

II. Course Objectives

1. To learn moving average technique
2. To distinguish between linear and non-linear fit
3. To study exponential smoothening methods
4. To understand model optimization trends
5. To learn to identify outliers

III. Course Content

1. Fundamentals of Data and Basic Forecasting Techniques
- a. Data Management
- b. Data value chain
- c. Moving Average
- d. Forecast Error

2. Regression based forecasting approaches
- a. Linear Fit
- b. Non-Linear Fit

3. Adaptive forecasting techniques
- a. Exponential Smoothing
- b. Underfitting – Double Exponential Smoothing

4. Advanced trend-based smoothing techniques
- a. Model Optimization – Double Smoothing with Damped Trend
- b. Overfitting – Triple Exponential Smoothing

5. Handling anomalies and seasonal variation
- a. Outliers – Triple Additive Exponential Smoothing

IV. Course Outcomes

By the end of this course, a student will be able to

CO1 Understand moving average technique to forecast demand

CO2 Compare between linear and non-linear fit

CO3 Apply exponential smoothening

CO4 Examine model optimization

CO5 Estimate the outliers

V. COs - POs - K Levels Matrix

CO<>PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO6	PO7	PO8	K levels
CO 1				3					K2
CO 2		3		3					K2
CO3				3					K3
CO 4		3		3					K4
CO 5		3		3					K5

VI. Course Materials

a. Mandatory

1. Vandeput, N. (2018). *Data science for supply chain forecast*. De Gruyter.

b. Additional

1. Cases and materials will be given by the faculty at the start of the course.

Elective Course

Course Code: 25PBA3502 | Title: Warehouse Management | Credits: 4

I. Course Description

This course provides a comprehensive understanding of procurement systems, warehousing operations, inventory management, warehouse technology, cost management, material handling, and sustainable warehouse practices. It focuses on integrating procurement and warehousing processes with modern technologies and cost-effective strategies to enhance supply chain efficiency.

II. Course Objectives

1. To Explain the fundamentals of procurement, warehousing, and supply chain logistics.
2. To Analyze procurement planning, supplier selection, and bidding processes
3. To Demonstrate key warehouse operations, safety measures, and value-added services
4. To Evaluate storage, inventory systems, and warehouse management technologies
5. To Assess cost management techniques, automation, and sustainability practices in warehousing

III. Course Content

1. Fundamentals of Procurement and Warehousing

a. Procurement system – Objectives, Principles and Evolution
b. Procurement cycle and planning – Cycle, Planning, Purchasing mix, Supplier selection process, Supplier Appraisal and Bidding process
c. Introduction to Warehousing – Role, Types, Location and Determinants

2. Warehouse Operations and Processes

a. Warehouse Process Overview – E-Commerce warehouse operations, Offloading procedures and Safety measures, Inspection and Quality verification, Documentation and Data recording
b. Warehouse Functions and Value added services – Packing and packaging systems, Stock management and Inventory Control, Security and Returns Processing, Dispatch and Logistics

3. Storage and Inventory Management

a. Storage and Inventory systems – Functions, Classification, Methods of controlling stock levels, Warehouse layout and Space Optimization
b. Warehouse management systems – WMS processing and implementation, Performance management and Outsourcing decisions

4. Warehouse Technology and Cost Management

a. Storage and Warehousing Information systems – Storage equipment, Warehouse handling equipment, Automated Storage and Retrieval system
b. Warehouse Cost Management – Types of Costs and Return on Investment (ROI) in Warehousing

5. Material Handling, Safety and Sustainability

a. Material Handling and Warehouse Safety – Product movement, Dispatch, Loading and Unloading activities, Health and Safety

b. Sustainable Warehouse Management – Warehouse environment and energy production, Product waste and disposal

IV. Course Outcomes

By the end of this course, a student will be able to

CO1 Illustrate the procurement cycle, supplier selection, and appraisal process

CO2 Evaluate warehouse functions, value-added services, and logistics integration

CO3 Classify storage and inventory systems, warehouse layouts, and stock control methods

CO4 Calculate warehouse costs and ROI in warehousing operations

CO5 Illustrate material handling procedures, loading/unloading processes, and warehouse safety.

V. COs - POs - K Levels Matrix

CO<>PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO6	PO7	PO8	K levels
CO 1		2		3					K3
CO 2				3					K5
CO3		2		3					K4
CO 4		3		3					K3
CO 5				3		3			K3

VI. Course Materials

a. Mandatory

1. Gwynne Richards, Warehouse Management: A Complete Guide to Improving Efficiency and Minimizing Costs in the Modern Warehouse, 3rd edition, (New Delhi: Kogan Page, 2018).

b. Additional

1. Villivalam Rangachari Rangarajan, Basics of warehouse and Inventory Management (The pillars of business logistics) Northern Press 2022.
2. James A Thompkins and Jerry D Smith, The Warehouse Management., 2nd Edition, 1998, Thompkins Publishers, USA.

Elective Course

Course Code: 25PBA3503 | Title: Containerisation and Multimodal Transport | Credits: 4

I. Course Description

This course provides a comprehensive understanding of containerization and multimodal transport. It covers container types, cargo handling, intermodal logistics, operational strategies, and international regulations. Students will explore the role of multimodalism in global trade, the physical operations involved, and the regulatory framework governing multimodal transport.

II. Course Objectives

1. To understand the fundamentals of containerization and multimodal transport.
2. To analyze different cargo types, stowage factors, and container handling processes
3. To apply multimodal transport strategies and intermodal systems in logistics operations
4. To evaluate the efficiency of different transport modes and their role in international trade
5. To interpret global conventions and regulatory frameworks for cargo liability and transport safety

III. Course Content

1. Fundamentals of Containerization

a. Containerization – Meaning, Importance, Features and Benefits
b. Major container trades
c. Container Terminal Planning and Distribution
d. Container Types and ISO Standard Dimensions
e. Non-containerizable Cargo and Specialized equipment

2. Cargo Handling and Stowage

a. Cargos in International trade – Cargo Distribution, Types, Characteristics, Cargo and Container handling equipment
b. Stowage – Meaning importance and factors
c. Cargo packing and Dangerous Goods Regulations – Types of packing and Cargo marking, Handling of dangerous cargo, IMDG code and its classes

3. Multimodal Transport and Intermodal Systems

a. Introduction to Multimodal Transport – Multi modal trade routes, Basic Intermodal systems, Modal Interface factors
b. Multimodal Strategy and Components – Factors favoring multimodalism, Strategic importance and components of Multimodal transport systems

4. Physical Multimodal Operations and Freight Systems

a. Operational Aspects of Multimodal Transport – Liners, Tramps, and Specialized vessels, Road transport vehicles, Rail transport vehicles and equipment, Air transport considerations, Port operations and facilities, Factors affecting mode and route choice

b. Logistics and Freight Handling – LCL and FCL, NVOCC, Freight forwarders and Consolidators, ICD and CFS, Free trade areas and SEZs

5. International Conventions and Regulatory Framework

a. Conventions governing Multimodal Transport – Cargo Liability conventions, International conventions relating to Bill of lading, The Hague and Hague Visby rules, Hamburg rule

b. Specialized Transport regulations – Conventions on dangerous cargo handling, Carriage of Perishable goods, International convention for safe containers.

IV. Course Outcomes

By the end of this course, a student will be able to

CO1 Identify key principles of containerization and multimodal transport.

CO2 Explain cargo handling techniques, stowage procedures, and containerized freight logistics

CO3 Apply intermodal transport strategies in trade and logistics operations

CO4 Assess multimodal transport efficiency and operational challenges

CO5 Interpret global regulations governing multimodal transport and cargo safety.

V. COs - POs - K Levels Matrix

CO<>PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO6	PO7	PO8	K levels
CO 1				3					K2
CO 2		2		3				3	K5
CO3				3					K3
CO 4		2		3				3	K5
CO 5				3				3	K3

VI. Course Materials

a. Mandatory

1. Alan E Branch & Michael Robarts (2014) Branch's Elements of Shipping. 9th Edition, Routledge Publication.

b. Additional

1. Hariharan, K. V. (2002) A Text Book on Containerization and Multimodal Transport. Shroff Publishers and Distributors: New Delhi.
2. Hariharan, K. V. (2002) Containerisation, Multimodal Transport and Infrastructure Development in India. 5th edition, Shroff Publishers and Distributors Pvt. Ltd.

Elective Course

Course Code: 25PBA3504 | Title: Contemporary Logistics | Credits: 4

I. Course Description

This course covers the economic impact, technology, transportation, sustainability, and risk management in modern supply chains. It explores digital supply chains, reverse logistics, and green practices to improve efficiency. The course also introduces best practices, performance measurement tools, and change management strategies, helping students apply logistics concepts effectively in real-world business operations.

II. Course Objectives

1. To understand the Economic impacts of logistics and its role in reducing costs.
2. To explore the role of technology in enhancing logistics efficiency.
3. To analyze Transportation and freight management strategies for improved supply chain performance.
4. To apply Reverse logistics and recycling concepts for sustainable operations.
5. To implement Risk management and sustainability practices in logistics.

III. Course Content

1. Introduction to Overview of Logistics

a. Economic Impact of Logistics
b. Logistics Systems and Cost Approaches
c. Technology in Logistics
d. E-commerce and Logistics Support
e. Efficiency and Cost Reduction Strategies

2. Logistics Service Providers

a. Supply Chain Success through Logistics
b. Competitive Advantage and Customer-Centric Decisions
c. Digital Supply Chains and Product Collaboration
d. Freight Transport and Sustainability Strategies
e. Regulations and Deregulation in Transport Modes
f. Reverse Logistics and Product Recovery Options

3. Sustainability in logistics

a. Corporate Strategy and Sustainable Logistics
b. Risk Management in Global Supply Chains
c. Corporate Social Responsibility (CSR) and Ethics
d. Green Supply Chains and Eco-Friendly Strategies
e. Sustainability and New Revenue Opportunities

4. Logistics role in change Management

a. Change Management Strategy and Planning
b. Organizational Readiness for Change
c. Complacency and Resistance to Change

d. Theory of Constraints in Lean Supply Chain
e. Blockchain Technology in Logistics

5. Best Practices in Logistics

a. Cross-Functional Roles in Logistics
b. Logistics Management Environment
c. Logistics Performance and Measurement Models
d. End-to-End Logistics and Supply Chain Operations
e. SCOR Framework and Supply Chain Improvement

IV. Course Outcomes

By the end of this course, a student will be able to
CO1 Understand the economic impact of logistics and its role in reducing costs.
CO2 Apply technology and digital solutions to enhance logistics efficiency
CO3 Evaluate strategies and sustainability practices in logistics
CO4 Implement risk management and corporate social responsibility (CSR) in supply chains
CO5 Develop skills in change management and applying innovative solutions like block chain in logistics.

V. COs - POs - K Levels Matrix

CO<>PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO6	PO7	PO8	K levels
CO 1		3		3			2		K2
CO 2		3		3			2		K4
CO3		3		3					K4
CO 4		3		3					K3
CO 5		3		3			2	2	K2

VI. Course Materials

a. Mandatory

1. Sustainable Logistics and Supply Chain Management (Principles and Practices for sustainable Operations and Management) 2nd Edition – Kogan Page Publications –2017, New York
2. Paul R Morphy Jr, A Michael Knemeyer (2017) Contemporary Logistics – 19th Edition Pearson, NewYork.

b. Additional

1. Christian Wurst (2021), Disrupting Logistics: Start-ups, Technologies, and Investors Building future supply chain, 1st Edition Springer
2. https://bit.ly/ContemporaryLogisticsbook
3. https://bit.ly/contemporarylogisticsSpringer

CORE COURSE

Semester IV

Core Course

Course Code: 25PBA4120 | Title: Innovation and Entrepreneurship | Credits: 3

I. Course Description

The major objective of the course is to give the students a hands-on, real-life experience on the why, what, how, and when to create a startup. The course challenges the participants to look at challenges - innovate, and discover a product or a service either a commercial or social startup

II. Course Objectives

1. To explore the concepts of entrepreneurship and startups, distinguishing their origins and understanding the principles of design thinking.
2. To develop ideation skills for both business and social startups, including idea assessment, validation, and market analysis.
3. To understand the components of a business plan, utilize the Business Canvas Model, and integrate major business domains for effective modeling.
4. To gain knowledge of fund raising and valuation techniques, analyze the role of government in promoting entrepreneurship, and create a detailed business plan.
5. To identify the challenges in entrepreneurship, cultivate an intrapreneur mindset, practice negotiation techniques.

III. Course Content

1. **Entrepreneurship and Start-ups**
   a. Entrepreneurship – a brief look at its origins v/s Startups
   b. Design thinking -intro
   c. Stages in design thinking
   d. Tools for effective design thinking process
   e. Design thinking for startups -exercise.
2. **Ideation for business and social startups**
   a. Ideation
   b. Idea -Assessment
   c. Idea -Validation
   d. Market Assessment and Competitor Analysis
3. **Business Planning**
   a. Building blocks of a business plan – Business Canvas Model
   b. Integrate major business domains for effective modeling
   c. Scaling up business models in a volatile environment
   d. Fundamentals of legal foundation for startup

4. **Fund raising and valuation**
   a. Business Valuation
   b. Techniques and methods of fund raising
   c. Role of Central Government and State Government in promoting Entrepreneurship
   d. Business plan Framework

5. **Challenges in Entrepreneurship**
   a. Intrapreneur Mindset
   b. Negotiation Techniques
   c. Scaling up or Exit – when and how

IV. Course Outcomes

By the end of this course a student will be able to

CO1 Compare entrepreneurship and startups, applying design thinking principles for effective problem-solving.

CO2 Evaluate business ideas through ideation, idea assessment, validation, and comprehensive market analysis.

CO3 Develop a detailed business plan using the Business Canvas Model and integrate major business domains for effective modeling.

CO4 Understand fund raising , valuation techniques and the role of government in promoting entrepreneurship.

CO5 Apply an intrapreneur mindset and negotiation skills during the preparation of business canvas

V. COs - POs - K Levels Matrix

CO<>PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO6	PO7	PO8	K levels
CO 1		3		3	3				K2
CO 2		3		3	3	2			K5
CO3	2			3	3	2			K6
CO 4				3	3	2		3	K3
CO 5				3	3		2		K3

VI. Course Materials

a. Mandatory

Ries, E. (2011*). The lean start-up*. Crown Business.

b. Additional

1. Thiel, P. & Blake, M. (2014). *Zero to one: notes on startups, or how to build the future hardcover.* Crown Business.
2. Khanka, S.S. (2012). *Entrepreneurial development*. S. Chand & Co. Ltd.

Finance

Electives

Semester IV

Elective Course

Course Code: 25PBA4101 | Title: Financial Derivatives | Credits: 4

I. Course Description

This course has become increasingly popular and most commonly used in the world of finance. This course provides basic knowledge about various types of financial derivatives like forward, futures, options and swaps.

II. Course Objectives

1. To understand the fundamentals of Derivatives
2. To analyze the mechanism of forward and futures contract
3. To apply option pricing models and Option strategies
4. To evaluate currency swap and interest rate swap
5. To analyse the regulatory framework and compliance mechanism for derivatives trading

III. Course Content

1. Basics of Derivatives

a. History of Derivatives market
b. Evolution of Derivatives in India
c. Types of Derivatives
d. Market Participants
e. Types of risks and Risk Management

2. Forward and Futures Contract

a. Introduction to Forward and Futures
b. Types of Futures Contract
c. Valuation of Futures contract
d. Pricing of Futures
e. Hedging and Arbitrage Strategies in Futures Market

3. Options

a. Option Terminology
b. Payoff of Options
c. Option Greeks
d. Option Pricing Models
e. Option Trading Strategies

4. Swap

a. Types of Financial Swaps

b. Interest Rate Swap
c. Valuation of Interest Rate Swap
d. Currency Swap
e. Valuation of Currency Swap

5. Regulation and the Trading Environment

a. Securities Exchange Board of India Act, 1992
b. Selection criteria for stock and index for Trading
c. Documents required to trade in Derivatives Market
d. Clearing and settlement Mechanism for Futures and Options
e. Investor Grievance Mechanism

IV. Course Outcomes

By the end of this course a student will be able to:

CO1 Explain the key concepts, history, types, and participants of derivatives
CO2 Examine the pricing, valuation, and trading process of forward and futures contracts.
CO3 Demonstrate option pricing calculations and trading strategies in market scenarios.
CO4 Assess the valuation and financial implications of currency swaps and interest rate swaps.
CO5 Interpret the regulatory framework and compliance mechanisms for derivatives trading.

IV. COs - POs - K Levels Matrix

CO<>PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	K Levels
CO1				3					K2
CO2		3		3			2		K4
CO3		3		3	2		2		K3
CO4		3		3	2		2	2	K5
CO5		3		3	2		2		K4

VI. Course Materials

a. Mandatory

Hull, J.C. (2017). Options, futures and other derivative securities. (10th ed.). Pearson.

b. Additional

1. Gupta, S.L. (2017). Financial derivatives - Theory, concepts and problems. (2nd ed.). Prentice Hall of India.
2. Kumar, S.S.S. (2010). Financial derivatives - Theory, concepts and practice. (4th ed). PHI Learning.
3. Stulz. (2011). Risk management and derivatives. (6th ed.). Cengage Learning.

Elective Course

Course Code: 25PBA4102 | Title: Financial Modelling using Spreadsheet | Credits: 4

I. Course Description

This course focuses on developing skills in financial modeling, covering key topics such as finance functions, financial forecasting, risk-return analysis, WACC, and DCF modeling. Students will learn to analyze financial statements, create forecasts, evaluate investment opportunities, and assess risk. Practical applications of these concepts will be emphasized throughout the course. By the end, students will be proficient in constructing and analyzing financial models to make informed business and investment decisions.

II. Course Objectives

1. To understand and apply fundamental finance functions
2. To develop the skills required for financial forecasting
3. To provide a comprehensive understanding of risk-return analysis
4. To calculate and apply the concept of Weighted Average Cost of Capital (WACC)
5. To develop proficiency in creating Discounted Cash Flow (DCF) models

III. Course Content

1. Introduction to Financial Modeling

a. Excel for financial Modeling
b. Finance Functions
c. Logical Functions
d. Statistical and Mathematical Functions
e. Lookup and Reference Functions
f. Date and Time Functions
g. Analysis Toolpak

2. Financial Statements Forecasting

a. Income Statement
b. Balance Sheet
c. Cash Flow Statement

3. Risk Return Analysis

a. Return and Types
b. Measuring Return
c. Risk and Types
d. Measuring Risk

4. **Weighted Average cost of Capital**
    a. Computing the value of Firm's Equity and Debt
    b. Computing Cost of Equity and Cost of Debt
    c. Computing Firm's Tax rate
    d. Computing Weighted Average Cost of Capital

5. **Discounted Cash Flow model**
    a. Free Cash Flows to value the Firm and its Equity
    b. Terminal Value
    c. DCF Model

IV. Course Outcomes

By the end of this course a student will be able to:

CO1 Apply finance functions in real-world scenarios to analyze financial statements and make informed decisions.

CO2 Create financial forecasts to predict future revenue, expenses, and cash flow.

CO3 Evaluate risk and return, enabling students to make better investment decisions.

CO4 Calculate WACC and apply it to evaluate financial decisions and investment opportunities.

CO5 Construct and analyze DCF models to assess the value of businesses and investment opportunities.

V. COs - POs - K Levels Matrix

CO<>PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	K Levels
CO1		3		3					K3
CO2		3		3					K6
CO3		3		3					K5
CO4		3		3			1		K3
CO5		3		3	1		2		K6

VI. Course Materials

a. Mandatory

1. Benninga, S. (2014). *Financial modeling*. MIT press.
2. Sengupta, C. (2004). *Financial modeling using excel and VBA*. John Wiley & Sons.

b. Additional

1. Penman, S. H. (2017). *Financial statement analysis and security valuation* (4th Ed). McGraw-hill.

Elective Course

Course Code : 25PBA4103 | Title: Corporate Finance and Financial Strategy |Credits:4

I. Course Description

This course explores advanced topics in corporate finance and financial strategy, focusing on Mergers & Acquisitions (M&A), Corporate Valuation, Private Equity & Venture Capital, Risk Management, Financial Derivatives, and Sustainable Finance. Students will develop analytical skills in financial decision-making, investment analysis, and strategic corporate financial planning using financial modeling, risk assessment, and sustainability frameworks.

II. Course objectives

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

1. Understand core concepts of corporate finance, including capital structure, risk management, and valuation
2. Analyze mergers & acquisitions strategies and financial restructuring in different industry contexts.
3. Apply financial models for valuation, risk assessment, and capital investment decisions.
4. Evaluate investment opportunities in private equity, venture capital, and sustainable finance.
5. Analyze the role of ESG factors in investment decisions and corporate financial strategy.

III. Course Content

1. Corporate Finance Fundamentals

a. Introduction to Corporate Finance & Strategic Financial Management
b. Capital Structure Theories & Cost of Capital
c. Dividend Policy & Shareholder Value Maximization
d. Financial Decision-Making Frameworks

2. Mergers & Acquisitions (M&A) Strategy

a. M&A: Motives, Types, and Valuation Approaches
b. Due Diligence, Synergies & Integration Planning
c. Hostile Takeovers, LBOs & Restructuring Strategies
d. Regulatory & Ethical Aspects of M&A

3. Corporate Valuation

a. Concepts of Corporate Valuation
b. Discounted Cash Flow (DCF) Valuation
c. Capital Asset Pricing Model
d. Market-Based Valuation Approaches
e. Asset-Based & Contingent Valuation

4. Private Equity & Venture Capital

a. PE & VC Market Structure, Fundraising & Deal Structuring
b. Valuation Techniques in PE & VC
c. Exit Strategies: IPOs, Buybacks, and Secondary Sales

d. Case Studies on PE/VC Investment Decisions

5. Sustainable Finance & Impact Investing

- **a.** ESG Investing: Principles & Strategies
- **b.** Green Bonds, Carbon Credits & Sustainable Risk Management
- **c.** Corporate Social Responsibility (CSR) & Financial Performance
- **d.** AI & Big Data in Sustainable Investment Decision-Making

IV. Course Outcomes

By the end of this course a student will be able to:

CO1 Explain financial strategies related to capital structure, risk management, and investment decisions..

CO2 Assess M&A deals, perform due diligence, and analyze synergies and risks.

CO3 3. Construct corporate valuation models using techniques like DCF, multiples, and real options.

CO4 Evaluate valuation techniques and exit strategies used in private equity and venture capital investments.

CO5 Evaluate the impact of sustainable finance instruments such as green bonds and carbon credits on corporate value and risk management.

V. COs - POs - K Levels Matrix

CO<>PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO6	PO7	PO8	K levels
CO 1	3	3		3					K2
CO 2		3		3					K6
CO3		3		3			1		K2
CO 4		3		3					K5
CO 5		3		3	1		2		K5

VI. Course Materials

a. Mandatory

1. Chandra, Prasanna. (2023). Corporate Valuation and Value Creation. McGraw Hill Education.

b. Additional

1. Khan, M.Y., & Jain, P.K. (2023). Financial Management: Text, Problems, and Cases (9th Edition). McGraw Hill Education.

Marketing

Electives

Semester IV

Elective Course

Course Code : 25PBA4201 | Title: Sales and Distribution Management | Credits: 4

I. Course Description

This course aims to familiarise the students with selling concepts and a broad framework which helps in developing a sound sales policy; organize and manage sales force; and develop a robust organization. Another key objective of the course is to make the students acquire sufficient understanding on marketing channels and enable them to develop a strong distribution system for companies.

II. Course Objectives

1. To understand the fundamentals of sales
2. To acquire professional selling skills.
3. To learn sales forecasting techniques
4. To know the strategies of sales administration.
5. To explore the models and methods for distribution management.

III. Course Content

1. Sales fundamentals

a. Marketing P's revisited
b. Sales as a function of promotion in different sectors
c. Marketing versus Selling
d. Sales and Distribution connect
e. AI in sales

2. Selling Skills

a. Psychology of selling
b. Buyer Decision Making process
c. Types of selling
d. Sales Process
e. Persuasion and negotiation in selling

3. Sales Forecasting

a. Forecasting basics
b. Qualitative techniques
c. Quantitative techniques
d. Choosing the right technique for forecasting
e. AI in Sales Forecasting

4. Sales Administration

a. Sales organization in different sectors
b. Organizational designs - choosing the right design
c. Territory management and sales quotas
d. Recruitment & training of sales force
e. Motivating sales force.

5. Distribution Management

a. Direct versus indirect models
b. Distribution structure in practice
c. Channel conflicts
d. Logistics – inventory, transportation and people management
e. Linking marketing and financials of channel partners

IV. Course Outcomes

By the end of this course a student will be able to

CO1 Outline the connect between sales and distribution CO2 Utilize the sales skills for an effective sales process

CO3 Apply different sales forecasting techniques in different business segments or sectors CO4 Evaluate management of sales territories through different organisational structures CO5 Analyse the different distribution models

V. COs - POs - K Levels Matrix

CO<>PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO6	PO7	PO8	K levels
CO 1	1		2	3				3	K2
CO 2			2	3		2	2	1	K3
CO3	1	1		3			2	2	K3
CO 4	1	1		3				2	K5
CO 5	1	1	1	3	3	1	2	1	K4

VI. Course Materials

a. Mandatory

Havaldar, K. K., & Cavale, V. M. (2017). ***Sales*** *and distribution management* (3rd ed.). McGraw Hill.

b. Additional

Anderson, P. K. (2017). *HBR's must reads on sales*. Harvard Business Review.

Elective Course

Course Code: 25PBA4202 | Title: Retail Management | Credits : 4

I. Course Description

This course provides a comprehensive view of retailing environment in India and exposes the students to current issues and developments in the industry - offline and online. It deals with the retail environment, shopper behavior, store location, merchandising, store operations, pricing, promotion and use of technologies including AI in retail.

II. Course Objectives

1.To understand the evolution and challenges of the Indian retail sector.
2. To assess consumer behaviour and its impact on retail decision-making.
3. To analyse location strategies.
4. To evaluate merchandise planning and store operations.
5. To devise retail pricing strategies and implement new technologies.

III. Course Content

1. **Introduction to Retail Management**
   a. Retailing - Indian Retail Industry and Economy
   b. Functions and Activities of Retailers
   c. Traditional vs Modern Retail Formats
   d. Retail Strategy - Omnichannel
   e. Challenges in Indian retail sector
2. **Understanding the Retail Consumer**
   a. Factors Affecting Shopper Behavior
   b. Stages of the Shopper's Decision-Making Process
   c. Use of AI to decode shopper behavior
   d. Retail Market Segmentation, Targeting and Positioning
   e. Consumer profiling using AI
3. **Retail Site Selection**
   a. Types of retail locations and Factors Affecting Location Decision
   b. Retail location strategy
   c. Trade Area Analysis and Site Selection Analysis using AI tools
   d. Mall Management
   e. Methods of Retail Expansion
4. **Merchandising and Store Operations**
   a. Merchandise Planning and Procurement
   b. Category Management
   c. Retail Branding and Private Labels

d. Store Design, Layout and Visual Merchandising using AI
e. Financial Aspects of Retail

5. Retail Pricing, Promotion and Technologies

a. Retail Pricing
b. Retail promotion
c. Retail logistics
d. E-commerce
e. Using AI for managing inventory

IV. Course Outcomes

By the end of this course a student will be able to

CO1 Explain the evolution of the Indian retail industry and formulate strategies for success.

CO2 Analyse shopper behaviour to optimize retail marketing strategies.

CO3 Assess factors for retail site selection to devise effective location strategies.

CO4 Design store operations and visual merchandising to enhance the customer experience.

CO5 Integrate advanced pricing strategies and emerging technologies to strengthen retail competitiveness.

V. COs - POs - K Levels Matrix

CO<>PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO6	PO7	PO8	K levels
CO 1				**3**					K2
CO 2		**2**		**3**					K4
CO3		**3**		**3**	**2**				K5
CO 4		**3**		**3**	**2**				K6
CO 5		**3**		**3**	**2**		**3**	**3**	K5

VI. Course Materials

a. Mandatory

Pradhan, S. (2020). *Retailing management.* (6th ed.). McGraw Hill Education (India) Private Limited.

b. Additional

Bajaj, C., Tuli, R., & Srivastava, V.N. (2016). *Retailing management.* (6th ed.). Oxford University Press.

Levy, M., Weitz, B., & Pandit, A. (2012). *Retailing management.* (8th ed.). McGraw Hill Education (India) Private Limited.

Elective Course

Course Code: 25PBA4203 | Title: Marketing Analytics | Credits: 4

I. Course Description

This course provides students adequate knowledge about Marketing Analytics. The students will have an exposure about various data related to customers, suppliers and other stake holders which is important to take predictive decisions.

II. Course Objectives

1. To know the comprehensive understanding of various data types used in marketing analytics
2. To apply statistical techniques in marketing data
3. To learn analytical techniques in Revenue Management and Pricing
4. To estimate customer lifetime value using analytics
5. To use analytics on the data of advertising, retailing and social media

III. Course Content

1. **Introduction to Marketing Analytics**
   a. Understanding Different Types of Marketing Data
   b. Data-Driven Decision Making in Marketing
   c. Visualization Techniques for Summarizing Marketing Data
   d. Descriptive, Predictive, and Prescriptive Analytics
2. **Statistical Techniques for Market Insights**
   a. Data Visualization and Interpretation
   b. Linear Regression Models
   c. Application of Linear Regression in sales data
   d. Cluster Analysis
3. **Revenue Optimization and Pricing Strategies**
   a. Point of Sale Data
   b. Right Pricing Approach
   c. Pricing Plans
   d. Price sensitivity and elasticity analysis
4. **Market Segmentation and Customer Value**
   a. Market Segmentation using Analytics
   b. Net Promoter Score
   c. Calculation of Lifetime Customer Value
   d. Predictive modeling for customer retention

5. **Retailing, Advertising and Social Media**
    a. Market Basket Analysis and Lift
    b. Measuring advertisement effectiveness
    c. Media Selection Models
    d. Social media analytics and sentiment analysis

IV. Course Outcomes

By the end of this course a student will be able to CO1 Understand the basics of marketing analytics
CO2 Apply statistical techniques and linear regression models to analyze marketing data
CO3 Apply marketing analytics for revenue management and pricing
CO4 Estimate lifetime customer value
CO5 Analyse retail, advertisement and social media data

V. COs - POs - K Levels Matrix

CO<>PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO6	PO7	PO8	K levels
CO 1		3		3				3	K2
CO 2		3		3			3	3	K3
CO3		3		3			3	3	K3
CO4		3		3			3	3	K6
CO5		3		3	3		3	3	K4

VI. Course Materials

a. Mandatory

Winston, W. L. (2014). *Marketing analytics: Data-driven techniques with Microsoft Excel.* Wiley.

b. Additional

Gupta, S. & Jathar, A. (2021). *Marketing analytics.* Wiley India Pvt. Ltd.

Grigsby, M. (2015). *Marketing analytics.* Kogan Page Limited.

Human Resources

Electives

Semester IV

Elective Course

Course Code: 25PBA4301 | Title: Organizational Change and Development | Credits: 4

I. Course Description

This course imparts students with the concepts of organizational change and development and makes them familiar with the process of Organizational Development interventions.

II. Course Objectives

1. To understand the nature and drivers of organizational change, differentiating between internal and external factors.
2. To identify and classify various types of organizational change and their impact on organizational strategies.
3. To explore prevalent models and theories of organizational change, and apply them to practical business situations.
4. To analyze the sources and manifestations of resistance to change within organizations and develop strategies to address them effectively.
5. To gain insights into the qualities and competencies required for OD practitioners to facilitate successful change initiatives.

III. Course Content

1. Organisational Change
   a. Nature of change- Internal & External changes
   b. Types of change
   c. Models of change
   d. Resistance to change
   e. AI in change management

2. Organization Development (OD)
   a. History of OD
   b. Values, assumption and beliefs of OD
   c. Models and theories of OD
   d. Foundations of OD

3. OD Practice
   a. OD practitioner qualities
   b. OD competencies

4. The Process of Organization Development
   a. Entering and Contracting
   b. Diagnosing
   c. Collecting, Analyzing, and Feeding Back Diagnostic Information
   d. Designing Interventions

5. OD Interventions

a. Human Process Interventions
b. Techno-structural Interventions
c. Human Resource Interventions
d. Strategic Change Interventions
e. Organisational Transformation

IV. Course Outcomes

By the end of this course a student will be able to

CO1 Understand the need for change and the importance of developing skills to facilitate organizational changes.
CO2 Explain the models and theories of OD
CO3 Analyse the competencies and qualities of OD practitioner
CO4 Evaluate the process of OD in an organisation
CO5 Examine the OD interventions for various situations in an organisation

V. COs - POs - K Levels Matrix

CO<>PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO6	PO7	PO8	K level
CO 1		3	3	3					K2
CO 2		3	3	3					K5
CO3		3	3	3	2				K4
CO 4		3	3	3	2			3	K5
CO 5		3	3	3	2			3	K4

VI. Course Materials

a. Mandatory

Cummings, T.G. & Worli, C G. (9 ed 2017) *Organization development and change***.** Cengage Learning.

b. Additional

French, W., Bell, C.H. & Veena, Jr. (2012). *Organizational development - Behavioural science interventions for organization improvement*. PHI.
Jones, G.R. (2012). *Organizational theory, design, and change***.** Pearson Education.
Sharma, R.R. (2012). *Change management - Concepts and applications*. Tata McGraw Hill.

Elective

Course Code: 25PBA4302 | Title: Labour Codes | Credits: 4

I. Course Description

This course provides a strong framework along with knowledge and understanding of the new code on wages in India. The students will understand the application of laws from a managerial perspective and labour law administration.

II. Course Objectives

1. To understand the changes in the new code on wages
2. To compare and classify the various types of wages
3. To learn the provisions of Provident fund, insurance and other employer obligations
4. To study the various employee benefits
5. To explore the models for social security measures for the gig workers.

III. Course Content

1. The Code on Wages-I

a. Definitions
b. Minimum Wages
c. Components of Minimum Wages
d. Fixing Working Hours
e. Fixing Floor Wages
f. Wages for Overtime work

2. The Code on Wages-II

a. Payment of Wages
b. Role of Advisory Board
c. Deductions
d. Payment of Bonus
e. Payment of Dues, Claims and Audit
f. Offences and Penalties

3. Employer Obligations

a. Social Security Organisations
b. Employees' Provident Fund
c. Schemes and Contributions
d. Employees State Insurance Corporation
e. State Insurance Fund
f. Benefits
g. Payment of Gratuity

4. **Employee Benefits**
   a. Payment of Maternity Benefit
   b. Medical bonus
   c. Creche Facility
   d. Employees' Compensation
   e. Claim and Distribution of Compensation

5. **Code on Social Security**
   a. Social Security and Cess for Construction workers
   b. Social security for Unorganised, Gig and Platform workers
   c. Prevention of Sexual Harassment at the Workplace

IV. Course Outcomes

By the end of this course a student will be able to

CO1 Understand the changes in the new wage codes

CO2 Classify the various types of wages and the payment of bonus

CO3 Apply the provisions of Provident fund, insurance and other employer obligations in an organisation

CO4 Assess the different employee benefits

CO5 Discuss the various models of social security measures for the gig workers

V. COs - POs - K Levels Matrix

CO<>PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO6	PO7	PO8	K level
CO 1		3	3	3	2	3		2	K2
CO 2		3	3	3	2	3		2	K4
CO3		3	3	3	2	3		2	K3
CO 4		3	3	3	2	3		3	K5
CO 5		3	3	3	2	3		3	K6

VI. Course Materials

a. Mandatory

The code on wages. (2020).

The code on social security. (2020).

b. Additional

Sinha, P.N.R. (2021). *Industrial relations, trade unions and labour legislations*. (3rd ed.). Pearson.

Elective Course

Course Code:25PBA4303 | Title: People Analytics | Credits: 4

I. Course Description

This course describes how HR effectiveness is measured in organizations. It introduces the central concepts of people orientated analytics through hands-on exercises, builds skills and competencies around the management, analysis and representation of data. The subject explores how analytics helps managers to address both tactical and strategic level human capital issues.

II. Course Objectives

1. To understand the fundamental principles of people-oriented analytics and its application in HR management.
2. To identify key metrics and indicators for measuring HR effectiveness within an organization.
3. To use various tools and techniques to analyse HR data
4. To apply predictive analytics for workforce planning and talent management.
5. To evaluate the ethical implications and challenges of data-driven HR decision-making.

III. Course Content

1. HR Metrics
   a. Types
   b. Application
   c. Payroll
   d. Performance appraisal

2. Descriptive Analytics
   a. Key excel functions
   b. HR Dashboards
   c. HR Data Visualization
   d. HR Data Mapping
   e. Use of Big Data in Data Visualization

3. Advanced HR Analytics
   a. Paired T test
   b. Factor Analysis
   c. HR modelling
   d. Sensitivity Analysis
   e. Cluster Analysis

4. Predictive Analytics in HR
   a. Workforce Planning Models
   b. Predicting Employee Turnover
   c. Sentiment Analysis in HR
   d. Predictive Performance Management
   e. AI & Machine Learning in HR Analytics

5. Ethical and Strategic Implications of People Analytics

a. Ethical Considerations in HR Data Usage
b. Data Privacy and Compliance (e.g., GDPR, CCPA)
c. Strategic HR Decision-Making Using Analytics
d. Case Studies of People Analytics Implementation
e. Future Trends in HR Analytics

IV. Course Outcomes

Completion of this course, students will be able to:

CO1 Develop metrics for performance appraisal
CO2 Examine different methods of visualizing HR data
CO3 Analyse HR data using various models, tools and techniques
CO4 Apply predictive analytics to workforce planning and talent management
CO5 Evaluate ethical considerations and compliance requirements in HR analytics.

V. COs - POs - K Levels Matrix

CO<>PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO6	PO7	PO8	K level
CO 1	3	3		3					K6
CO 2		3		3		3			K5
CO3		3	3	3		3			K4
CO4	3	3			3		3		K4
CO5	3		3	3		3			K5

VI. Course Materials

a. Mandatory

Bhattacharyya, D.K. (2017). *HR analytics: Understanding theories and applications*. Sage Publications.

b. Additional

1. Banerjee,P., Pandey.J., & Gupta.M. (2017). Practical application of HR analytics. Sage Publications.
2. Khan,N., & Millner,D. (2020). Introduction to people analytics: A practical guide to data- driven HR. Kogan Publications.
3. Walsh, M.J. (2021). HR analytics essentials. Vibrant Publishers.

IT & Analytics

Electives

Semester IV

Elective Course

Course Code: 25PBA4401 | Title: Deep Learning and Artificial Intelligence | Credits:4

I. Course Description

This course is intended to give a holistic understanding on Deep Learning and Artificial Intelligence and its applications. This course trains the students to basic of neural networks, convolutional neural networks, long and short-term memory networks.

II. Course Objectives

1. To understand the basics of Neural Network and their platforms.
2. To examine the different architectures of Artificial neural networks.
3. To know the program to use reinforcement and Convolutional Neural Networks.
4. To study the Artificial Intelligent Systems and review their applications.
5. To Learn Prompt Engineering techniques

III. Course Content

1. Deep Learning
   a. Deep learning architectures
   b. Biological neural network
   c. Artificial neural Networks
   d. Deep Neural network
   e. Deep Learning Libraires

2. Architecture of Artificial Neural Networks
   a. Recurrent Neural networks
   b. Memory Augmented Neural Networks
   c. Differentiable Neural Computers

3. Convolution Learning and Reinforcement
   a. Perceptron
   b. Convolution Layers
   c. Multiple Layer Perceptron
   d. Recurrent Neural Networks

4. Artificial Intelligence
   a. Advancements in Computer Vision
   b. AI Business Applications
   c. Non-AI &AI Techniques
   d. Intelligent Agents and Environments
   e. Nature of environments
   f. Structure of agents

5. Prompt Engineering - Generative AI
   a. Large Language Model

b. Prompting Techniques
c. Meta Prompting
d. Prompt Chaining, Tree of Thoughts
e. LLM Agents, LLM Reasoning
f. Multimodal Prompting
g. Generative Adversarial network
h.

IV. Course Outcomes

By the end of this course a student will be able to

CO1 Understand the basics of Neural Network and their platforms.

CO2 Examine the different architectures of Artificial neural networks.

CO3 Evaluate the program to use reinforcement and Convolutional Neural Networks.

CO4 Discuss the Artificial Intelligent Systems and review their applications.

CO5 Evaluate the Generative AI and their usage

V. COs - POs - K Levels Matrix

CO<>PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO6	PO7	PO8	K levels
CO 1	2			3			2	1	K2
CO 2	2			3		2	2		K3
CO3	2			3		2	1	2	K4
CO 4	2			3			2		K5
CO 5	2			3			2	2	K2

V. Course Materials

a. Mandatory

1. Goodfellow Ian,Bengio Yoshua,Courville Aaron(2016).Deep Learning.The MIT Press.
2. Tom, T. (2019). *Artificial intelligence basics: A non-technical introduction*. A Press.

b. Additional

1 Buduma, N., & Locascio, N. (2017). *Fundamentals of deep learning: Designing next-generation machine intelligence algorithms*. (1st ed.). O'Reilly Media.

2. Russell, S., & Narvig, P. (2015). *Artificial intelligence - Modern approach.* (3rd ed.). Pearson Education.

Elective Course

Course Code: 25PBA4402 | Title: Block Chain and Business Applications | Credits: 4

I. Course Description

This course gives an introduction of Block Chain Technology and its applications. This course deals the basic of bitcoin transactions in the cryptocurrency

II. Course Description

1. To learn the basics of Distributed systems
2. To study use of Cryptocurrency systems
3. To know the different Ethereum Tools for transactions
4. To analyse the smart contract systems
5. To examine the Block chain applications and its development

III. Course Content

1. Introduction

a. Distributed Systems
b. Distributed Hash Table
c. Block, Miner, Block reward
d. Centralized and decentralizes system
e. Types of block chain

2. Cryptocurrency

a. Types of Cryptocurrencies and Cryptography
b. Block Chain Works
c. Hash Encryptions
d. Digital Signature
e. Memory Hard Algorithm
f. Bitcoin, Bitcoin Wallet and Bitcoin Exchange
g. Merkley Tree

3. Ethereum Tools

a. Ethereum node
b. Tokens, Proofs
c. Ethereum Tools
d. Ethereum transactions

4. Smart Contracts and Hyperledger

a. Distributed ledger technology
b. Smart contracts
c. Hyperledger Fabric – Transaction Flow
d. Immutable records
e. Trading Strategies using block chain

5. Block Chain Applications

a. New Tools and Applications
b. Latest Block Chain Platforms
c. Products of Block Chains
d. Block chain as Services (BaaS)
e. Block chain Maturity model
f. Block chain Sustainability model
g. Block chain software developer

IV. Course Outcomes

By the end of this course a student will be able to

CO1 Understand the basics of Distributed systems

CO2 Analyse the use of Cryptocurrency systems

CO3 Apply the different Ethereum Tools for transactions

CO4 Evalute the smart contract systems

CO5 Discuss examine the Block chain applications and its development

V. COs - POs - K Levels Matrix

CO<>PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO6	PO7	PO8	K levels
CO 1				3	2		2	1	K2
CO 2				3		2			K3
CO3				3	2	2	1		K4
CO 4				3		1			K5
CO 5	2			3	2		2	2	K2

VI. Course Materials

a. Mandatory

1. Saurabh, K. & Saxena, A. (2020). *Blockchain technology: Concepts and applications*. Wiley India.

b. Additional

1. Antony, L. (2018). *The basics of bitcoins and blockchains: An introduction*. Mango Media.
2. Antonopoulos, A.M. (2017). *Mastering bitcoin.* (2nd ed.). O'Reilly Media.
3. Danial, K. (2019). *Cryptocurrency investing for dummies*. Wiley India.

Elective Course

Course Code: 25PBA4403 | Title: Cyber Security | Credits: 4

I. Course Description

This course introduces the students to understand the concept of cyber security and help them to identify the security threats, types and models. The students will be able to identify the network security models and their applications.

II. Course Objectives

1. To explain the basics in Cybersecurity.
2. To learn the concept of cryptography and network security.
3. To explain the techniques for application security.
4. To apply different techniques to solve cyber security threats.
5. To examine the importance of Policy and cyber security awareness

III. Course Content

1. Cyber Security Awareness

a. NSTISSC
b. Information assurance
c. Security Threats and vulnerabilities
d. Data Breach
e. Security Standards
f. Governance, Risk and Compliance
g. OSI Security Architecture

2. Cryptography and Network security

a. Symmetric and Asymmetric Cryptography
b. Modern Cryptography
c. Intrusion Prevention
d. Detection and Management
e. Defense Technologies, Attack and Exploits
f. Firewall, Computer Forensics
g. Security for VPN and Next Generation Networks.

3. Host and Application security

a. Control hijacking
b. Software architecture and a simple buffer overflow
c. Side-channel attacks

4. Mobile Security

a. Mobile, GSM and Wireless LAN security
b. Malware - Viruses and worms

5. Policy and Security Awareness

a. System Specific Security Policy
b. Enterprise Information Security Policy
c. Information Privacy, Measurement Theories
d. National cyber security Policy
e. Cyber Security Awareness

IV. Course Outcomes

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

CO1 Understand the basics in Cybersecurity.

CO2 Analyse the concept of cryptography and network security.

CO3 Examine the concept of host and application security.

CO4 Apply different techniques to solve cyber security threats.

CO5 Discuss the importance of Policy and cyber security awareness

V. COs - POs - K Levels Matrix

CO<>PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO6	PO7	PO8	K levels
CO 1		3		3			2		K2
CO 2		3		3			2		K4
CO3		3		3					K4
CO 4		3		3					K3
CO 5		3		3			2	2	K2

VI. Course Materials

a. Mandatory

Whitman, M.E., & Mattord, H.J. (2017). *Principles of information security*. (6th ed.). Course Technology Inc.

b. Additional

1. Nelson, B., Phillips, A. & Steuart, C. (2018). *Guide to computer forensics and investigations.* (6th ed.). Cengage Learning.
2. Bishop, M. (2015). *Computer security: Art and science*. (1st ed.). Addison-Wesley Professional.

Supply Chain Management

Electives

Semester IV

Elective Course

Course Code: 25PBA4501| Title: Global Supply Chain Management | Credits: 4

I. Course Description

The development of international trade is driven by international logistics and management and the provision of the global supply chain. The ultimate objective of global supply chain management is to link the marketplace, distribution network, manufacturing and procurement.

II. Course Objectives

1. To understand the principles and concepts of supply chain management from a global business perspective.
2. To evaluate the production/service process in a global context.
3. To learn the distribution network process in a global context.
4. To know the importance of the mathematical models.
5. To apply the models related to supply chain management.

III. Course Content

1. Introduction to global supply chain management

a. Role of the Supply Chain
b. Managing the Supply Pipeline for Global Trade Flows
c. The Global Logistics Operator
d. Comparison Between National and International Logistics
e. Globalization and International Trade Environment.

2. Factors and Challenges Driving Logistics and Supply Chain Management

a. Factors Driving Global Supply Chain Management
b. Customs and Global Supply Chain Management
c. Management of the Inventory in the Supply Chain
d. Analysis Including Vendor Management
e. Evolution and Revolution of Logistics and Supply Chain Management
f. Prevention of Supply Chain Disruptions using AI

3. Constituents of the International Procurement

a. Introduction
b. International Purchasing Systems Strategy
c. Financing Global Supply Chain

4. International Logistics Operator:

a. Criteria of Selecting the Third-Party Logistics Operator
b. Contract Logistics
c. Warehousing- Customs Clearance
d. Air Freight

5. **International Logistics Procedures:**
   a. Shipment Procedures
   b. Dispatch Time Data
   c. Statutory Reporting
   d. Profitability Analysis

IV. Course Outcomes

By the end of this course, a student will be able to

CO1 Identify the art of using the concept of GSCM.
CO2 Use the application of inventory models in decision-making. CO3 Apply the art of selecting the vendors.
CO4 Analyse the constituents of the international procurement.
CO5 Apply the knowledge gained to choose the appropriate international logistics operator.

V. COs-K Levels-POs Matrix

CO<>PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO6	PO7	PO8	K levels
CO 1		3		3			2		K2
CO 2		3		3			2		K4
CO3		3		3					K4
CO 4		3		3					K3
CO 5		3		3			2	2	K2

VI. Course Materials

a. Mandatory

Branch, AE [2009], Global SCM and International Logistics [1 ed.], Roultedge.

b. Additional

Materials will be given by course coordinators

Elective Course

Course Code: 25PBA4502 | Title: Port and Airport Management for Logistics | Credits: 4

I. Course Description

This course provides a comprehensive understanding of the structure, functions, and operations of sea and air ports, with a focus on their critical role in global logistics and trade. Students will explore the different types of ports in India, their connectivity, layout, and the key stakeholders involved in port operations. The course also delves into the intricacies of shipping procedures and documentation, including customs clearance, and examines the vital role of containerization in international transport. Practical insights into airport operations, air freight management, and the influence of international organizations like IATA will be covered.

II. Course Objectives

1. To learn Port structure, functions and operations.
2. To be familiar with port operations
3. To understand the Airport management for logistics.
4. To be aware of the various port documents
5. To understand the importance of containerisation

III. Course Content

1. Sea Port Structure and Functions

a. Types of sea ports in India
b. Major sea ports in India and and connectivity
c. Layout of Ports
d. Functions of ports: Administrative and operational
e. Ports and their stakeholders

2. Sea Port Operations

a. Berths and Terminals
b. Ship Operation
c. Cargo positioning and stowage on the terminal
d. Container handling and terminal operation
e. Safety of cargo operations

3. Air port structure and functions

a. Introduction to Air Transport
b. Major airports in India and connectivity
c. Structure of air ports
d. Air port operations and Cargo Handling
e. Air freight
f. IATA

4. Shipping procedures and documentation

a. Major shipping documents in Sea ports -exports and imports
b. Major shipping documents in Air ports -exports and imports

c. Customs clearance procedures in sea ports
d. Customs clearance procedures in Air ports
e. INCO terms

5. Containerisation

a. Inland Container depot and its functions
b. Container Freight stations and its functions
c. Types of containers
d. Green shipping

IV. Course Outcomes

By the end of this course, a student will be able to
CO1 Recall and explain the key components and functions of sea port structures
CO2 Demonstrate how to handle containerized cargo, including container handling and terminal operation procedures
CO3 Examine airport operations, including the management of air freight and cargo handling processes
CO4 Apply the principles of customs clearance to manage the documentation process effectively
CO5 Assess the environmental implications of green shipping and the practices that can be adopted in containerized transport

V. COs-K Levels-POs Matrix

CO<>PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	K LEVEL
CO1				3					2
CO2		2		3					3
CO3		2		3					4
CO4		2		3					3
CO5				3		2		2	5

VI. Course Materials

a. Mandatory

1.Branch, AE [2009], Global SCM and International Logistics [1 ed.], Roultedge.
2. Business and Economics of Port Management, Wei Yim Yap, Routledge, London & New York 2021
3. ICS.2011/12,ShipOperationsandManagement.London,UK.

b. Additional

1. Business and Economics of Port Management – Wei yim yap Routledge, London & New York 2021
2. JOHN.W. DICKE.2014, Reeds 21st Century Ship Management. Bloomsbury Publishing, UK.
3. LUNY. H.V., LAIK.-H., CHENGT.C.E. CHENG, 2010, Shipping and Logistics Management." Springer, U.K.
4. PROSHANTOK.MUKHERJEE, MARK BROWN RIGG (2013), Farthing on International Shipping, 4thedition, Springe

Elective Course

Course Code: 25PBA4503 | Title: Risk Modeling for Supply Chain Management |Credits: 4

I. Course Description

As the nature of supply chains evolves with increasing globalization, consolidation and just in time inventories, the amount of risk continues to increase. This course enables the students to get an insight on valuable perspectives on supply chain vulnerabilities. With emphasis on data, models and modeling systems the students can analyze supply chain planning problems.

II. Course Objectives

1. To identify Business Models
2. To understand the simulation models
3. To know the types of inventory control models
4. To understand the risk in supply chain
5. To know the latest trends in the SCM

III. Course Content

1. Models for Supply Chain Management

a. Integrated Planning and Models for SCM
b. Modeling Systems
c. Transportation Network data
d. Integrating Supply Chain & Demand Management

2. Simulation Model

a. Introduction to Simulation Model
b. Deterministic Simulation - Monte Carlo Simulation
c. Application to Business Decision Making

3. Inventory Control

a. Introduction to Inventory Theory
b. Deterministic Models
c. Probabilistic Models
d. ABC Classification

4. Risk and Management

a. Risk in the Supply Chain
b. Features of risk
c. Decision with Uncertainty
d. Decision Tree Model

5. Trends in Supply Chain Management

a. Integration of Supply Chain
b. Cost Reduction
c. Outsourcing
d. Changing Practices in Logistics
e. Approaches in Risk Management using AI

IV. Course Outcomes

By the end of this course, a student will be able to CO1 Analyze the different models for SCM. CO2 Apply the simulation concepts
CO3 Examine inventory Control techniques and its application. CO4 Evaluate the risks using decision tree model
CO5 Understand the current trends in the SCM

V. COs-K Levels-POs Matrix

CO<>PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO6	PO7	PO8	K levels
CO 1		**3**		**3**					K3
CO 2				**3**		3		3	K4
CO3				**3**				**3**	K4
CO 4		**3**	**3**	**3**					K5
CO 5		**3**		**3**					K2

VI. Course Materials

a. **Mandatory**

Gregory L. Schlegel , Robert J. Trent Supply Chain Risk Management: An Emerging Discipline (Resource Management) Hardcover – Import, 3 Nov 2014.

b. Additional

Donald Waters – Supply Chain Risk Management, Published by the Chartered Institute of Logistics & Transport, U.K