

NEP-2020 Based Curriculum

Master of Business Administration

(With effect from July 2026 batch)

Total Credits: 86

Semester 1 Credits: 22					Total
S.No.	Course title	Code	Type	Credits	Hours
					L-T-P-S
1.	Financial Statements & Analysis	MS501	PCC	3	2-0-2-0
2.	Business Statistics & Analytics	MS502	PCC	3	2-1-0-0
3.	Technology Management for Business	MS503	PCC	3	2-0-2-0
4.	Data Visualization & Modelling	MS504	SEC	2	1-0-2-0
5.	Business Communication	MS505	SEC	1	0-0-2-0
6.	Marketing Management	MS506	PCC	3	2-0-2-0
7.	Organization Design & Behavior	MS507	PCC	2	2-0-0-0
8.	Entrepreneurship Development	MS508	HSMC	2	2-0-0-0
9.	Economics	MS509	PCC	3	3-0-0-0
				Total	22
					16-1-10-0
					27

Semester 2 Credits: 22					Total
S.No.	Course title	Code	Type	Credits	Hours
					L-T-P-S
1.	Corporate Finance	MS510	PCC	3	2-0-2-0
2.	Human Resource Management	MS511	PCC	3	2-0-2-0
3.	Operations Management	MS512	PCC	3	2-1-0-0
4.	Business decision Modelling	MS513	PCC	3	2-1-0-0
5.	Business research methods	MS514	PCC	3	2-0-2-0
6.	Artificial Intelligence for business	MS515	PCC	3	2-0-2-0
7.	IT Audit & Security	MS516	PCC	2	2-0-0-0
8.	Design thinking & Innovation	MS517	SEC	1	1-0-0-0
9.	Business Law & IPRs	MS518	HSMC	1	1-0-0-0
				Total	22
					16-2-8-0
					26

Exit: After successful completion of one year (first two semesters), students may get a *Diploma in Business Administration*. They need to earn an additional 6 credits in summer, before exit.

Semester 3 Credits: 22					Total
S.No.	Course title	Code	Type	Credits	Hours
					L-T-P-S
1.	Strategic Management	MS601	PCC	3	2-0-2-0
2.	Business & IT Consulting	MS602	PCC	2	1-0-2-0
3.	Workshop on advanced communication skills	MS603	SEC	1	0-0-2-0
4.	Business Ethics and corporate governance	MS604	PCC	2	2-0-0-0
5.	Two Courses to be chosen from one of the Baskets 1/2/3/4/5/6/7		PEC	3	2-0-2-0
6.			PEC	3	2-0-2-0
7.	Two Courses to be chosen from one of the Baskets 1/2/3/4/5/6/7		PEC	3	2-0-2-0
8.			PEC	3	2-0-2-0
9.	Summer Internship	MS605	ELC	2	0-0-0-2
				Total	22
					13-0-14-2
					29
Basket 1: Marketing Management					
Basket 2: Financial Management					
Basket 3: Operation Management					
Basket 4: Human Resource Management					
Basket 5: Information Technology Management					
Basket 6: Entrepreneurship Development					
Basket 7: Agri-Business Management					

Semester 4 Credits: 20					Total
S.No.	Course title	Code	Type	Credits	Hours
					L-T-P-S
1.	IT Product Management	MS606	PCC	2	2-0-0-0
2.	Sustainability and Social Audit	MS607	HSMC	2	2-0-0-0
3.	Two Courses to be chosen from one of the Baskets 1/2/3/4/5/6/7		PEC	3	2-0-2-0
4.			PEC	3	2-0-2-0
5.	Two Courses to be chosen from one of the Baskets 1/2/3/4/5/6/7		PEC	3	2-0-2-0
6.			PEC	3	2-0-2-0
7.	Capstone Project	MS608	ELC	4	0-0-0-4
				Total	20
					12-0-8-4
					24
Basket 1: Marketing Management					
Basket 2: Financial Management					
Basket 3: Operation Management					
Basket 4: Human Resource Management					
Basket 5: Information Technology Management					
Basket 6: Entrepreneurship Development					
Basket 7: Agri-Business Management					

List of Elective Baskets					
S.No.	Course title	Code	Type	Credits	Hours
					L-T-P-S
Basket 1: Marketing Management					
1.	Advertising	MS609	PEC	3	2-0-2-0
2.	Consumer Analytics	MS610	PEC	3	2-0-2-0
3.	Consumer Behavior	MS611	PEC	3	2-0-2-0
4.	Digital Marketing	MS612	PEC	3	2-0-2-0
5.	International Marketing	MS613	PEC	3	2-0-2-0
6.	Marketing Technology	MS614	PEC	3	2-0-2-0
7.	Marketing of Services	MS615	PEC	3	2-0-2-0
8.	Retail Management and rTech	MS616	PEC	3	2-0-2-0
9.	Data-Driven Marketing	MS617	PEC	3	2-0-2-0
10.	Social Media Marketing	MS618	PEC	3	2-0-2-0
Basket 2: Financial Management					
11.	Security Analysis and Portfolio Management	MS619	PEC	3	2-0-2-0
12.	International Financial Management	MS620	PEC	3	2-0-2-0
13.	Strategic Cost Management	MS621	PEC	3	2-0-2-0
14.	Behavioral Finance	MS622	PEC	3	2-0-2-0
15.	Management of Banking and Financial Institutions	MS623	PEC	3	2-0-2-0
16.	Financial Technology	MS624	PEC	3	2-0-2-0
17.	Financial derivatives and Risk Management	MS625	PEC	3	2-0-2-0
18.	Project Appraisal and Financing	MS626	PEC	3	2-0-2-0
Basket 3: Operation Management					
19.	Supply Chain Management	MS627	PEC	3	2-0-2-0
20.	Strategic Sourcing and Logistics Management	MS628	PEC	3	2-0-2-0
21.	Project Management	MS629	PEC	3	2-0-2-0
22.	Advanced Operations Research	MS630	PEC	3	2-0-2-0
23.	Total Quality Management and Six Sigma	MS631	PEC	3	2-0-2-0
24.	Knowledge Management	MS632	PEC	3	2-0-2-0
25.	Sustainable and Global Supply Chain	MS633	PEC	3	2-0-2-0
26.	Service Operations Management	MS634	PEC	3	2-0-2-0
Basket 4: Human Resource Management					
27.	Business Transformation and VUCA	MS635	PEC	3	2-0-2-0
28.	Talent and Competency Management	MS636	PEC	3	2-0-2-0
29.	Managing Working Dynamics and Diversity	MS637	PEC	3	2-0-2-0
30.	Labour Law and Compensation	MS638	PEC	3	2-0-2-0
31.	International Human Resource Management	MS639	PEC	3	2-0-2-0
32.	Employer Brand Building	MS640	PEC	3	2-0-2-0
33.	Emotional Intelligence and Leadership	MS641	PEC	3	2-0-2-0
34.	Creativity and Innovation	MS642	PEC	3	2-0-2-0
Basket 5: Information Technology Management					
35.	IT Governance	MS643	PEC	3	2-0-2-0
36.	Cybersecurity Strategy	MS644	PEC	3	2-0-2-0

37.	Cloud Computing for Business	MS645	PEC	3	2-0-2-0
38.	Search Engine Optimization	MS646	PEC	3	2-0-2-0
39.	Software Project Management	MS647	PEC	3	2-0-2-0
40.	Business Intelligence	MS648	PEC	3	2-0-2-0
Basket 6: Entrepreneurship Development					
41.	Entrepreneurial Marketing & Growth	MS649	PEC	3	2-0-2-0
42.	Legal & Ethical Aspects of Entrepreneurship	MS650	PEC	3	2-0-2-0
43.	Entrepreneurial Strategy	MS651	PEC	3	2-0-2-0
44.	Innovation, Effectuation & Feasibility	MS652	PEC	3	2-0-2-0
45.	Product Development & MVP Design	MS653	PEC	3	2-0-2-0
46.	Startup Finance & Fundraising	MS654	PEC	3	2-0-2-0
Basket 7: Agri-Business Management					
47.	Agricultural Renewable Energy	MS655	PEC	3	2-0-2-0
48.	Digital Agribusiness Management	MS656	PEC	3	2-0-2-0
49.	Farm Equipment Management	MS657	PEC	3	2-0-2-0
50.	IoT-Enabled Agribusiness Supply	MS658	PEC	3	2-0-2-0
51.	Horticultural Production Management	MS659	PEC	3	2-0-2-0
52.	Smart Agribusiness Policies	MS660	PEC	3	2-0-2-0

Semester wise Credit distribution as per NEP

	Sem1	Sem 2	Sem 3	Sem 4	Total Credits
PCC	17	20	7	2	46
PEC	0	0	12	12	24
SEC	3	1	1	0	5
HSMC	2	1	0	2	5
ELC	0	0	2	4	6
Total Credits	22	22	22	20	86

PCC: Program Core Course; PEC: Program Elective Course; SEC: Skill Enhancement Course; HSMC: Humanities, Social Science, and Management Course; ELC: Experiential Learning Course

L-T-P (hr)

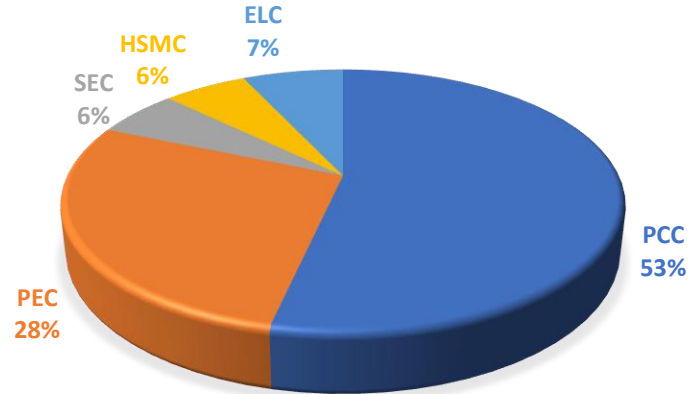
Lecture-L: 1 Credit = 1 hr/ week

Tutorial-T: 1 Credit = 1 hr/week

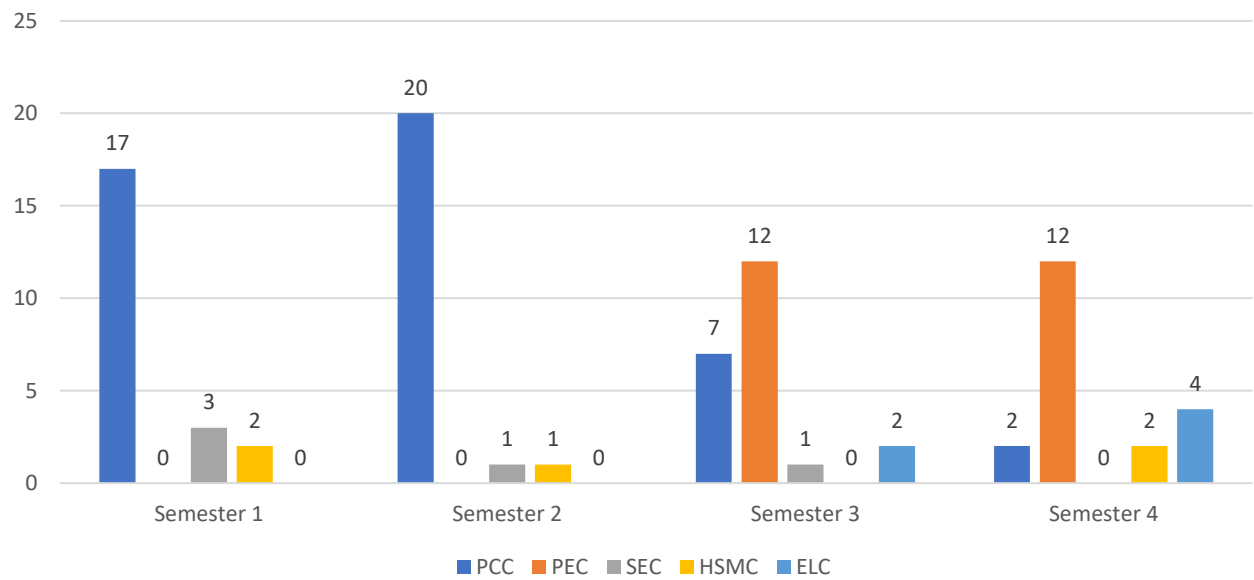
Practical-P: 1 Credit = 2 hr/week

Self-Study-S: 1 Credit= 1 hr/week

PERCENTAGE DISTRIBUTION OF CREDITS



Semester-wise Credit Distribution



Course Curriculum

MBA

SEMESTER 1

PCC: Program Core Course, PEC: Program Elective Course, SEC: Skill Enhancement Course
HSMC: Humanities, Social Science, and Management Course, ELC: Experiential Learning Course

Financial Statements and Analysis (MS501)

(PCC 3 Credits 2-0-2-0)

Objective

This course will help the students to understand the basics of Financial Statements analysis from the perspective of its application in various business decisions.

Course Outcomes

After completing the course, the students will be able to:

- Understand the structure and components of financial statements & Analysis.
- Apply financial analysis techniques to make informed business decisions.
- Understand the limitations and challenges of financial statement analysis.

Introduction to Financial Statements

Financial Statements & Accounting Principles, Overview of financial statements, Users of financial statements, role of accounting in financial reporting, Types of financial statements, Accounting equation & related concepts, Annual Reports & their importance.

The Balance Sheet and Income Statement

Structure of the balance sheet: Assets, cash, inventory, property, and equipment, Liabilities, accounts payable, loans, and long-term debt. Equity, Analysing liquidity and solvency using the balance sheet, Common size balance sheet analysis. Structure of the Income Statement, Revenues, Expenses, Cost of goods sold, operating expenses, and non-operating expenses., Net Income, EPS, Common Size Income Statement Analysis.

Depreciation and Inventory Valuation

Concept, methods of Depreciation, effects on balance sheet & income statement, Methods of Inventory Valuation, Impact of Inventory Valuation, gross profit, and tax implications, need for adjusting inventory values in financial statements.

The Cash Flow Statement

Components, Operating Activities, Investing Activities, Financing Activities, Importance of Cash Flow in Assessing Financial Health, Distinguishing between cash flow and net income, cash flow cycle and its implications for liquidity, understanding free cash flows.

Financial Statement Analysis Techniques

Vertical & Horizontal Analysis, Ratio Analysis, DuPont Analysis, Interpreting Financial Statements for Decision-Making, Evaluating Company Performance, Benchmarking Against Industry Standards and Competitors, Variation Across Different Industries.

Reference Books:

- “Financial Statement Analysis”, Charles H. Gibson, South-Western, 9781133189404.
- “Financial Statements: A Step-by-Step Guide to Understanding and Creating Financial Reports”, Thomas R. Ittelson, Career Press Incorporated, 9781601638618.
- “Financial Statement Analysis”, K. R. Subramanyam, John Wild, McGraw-Hill Education, 9780073379432.

Business Statistics and Analytics (MS502)

(PCC 3 Credits 2-1-0-0)

Objective

- To summarize and visualize business data effectively
- To apply probability concepts to uncertainty and risk
- To conduct hypothesis testing for managerial decisions
- To use regression and forecasting for managerial decisions
- To perform statistical analysis using Excel/Power BI/Python/R
- To translate analytical results into actionable business insights
- To solve real-world problems using data-driven reasoning

Course Outcomes

- Explain basic statistical concepts such as statistical collection, species characteristics, statistical series, tabular and graphical representation of data, measures of central tendency, dispersion and asymmetry, correlation, and regression analysis.
- Analyse datasets using descriptive and inferential techniques
- Calculate basic statistical parameters (mean, measures of dispersion, correlation coefficient, indexes) and choose appropriate statistical tests
- Based on the acquired knowledge to interpret the meaning of the calculated statistical indicators and build predictive models
- Develop dashboard and reports, and interpret outputs for managerial decisions
- Communicate findings professionally

Unit I- Introduction to Business Statistics & Analytics

Role of statistics in business decision-making, Measurement & Scaling Techniques, Nominal Scale, Ordinal Scale, Interval Scale, Ratio Scale, Criteria for good measurement, attitude measurement - Likert's Scale, Semantic Differential Scale, Thurstone-equal appearing interval scale.

Unit II- Exploring Data, Data Visualization, and Descriptive Statistics

Basic concept of Population and Sample, Type of Data - Numerical and Categorical, Frequency distribution, charts and graphs, Descriptive statistics: Measures of central tendency: Average: Concept, Types - Mathematical Averages: Arithmetic Mean, Median, Mode. Partition Values: Quartiles, Deciles, and Percentiles - Comparison of the various Measures of Central Tendencies. Dispersion, Correlation, Measures of Dispersion: Standard Deviation -Variance - Coefficient of Variance, Skewness: Relative measures of skewness- Karl- Pearson Coefficient of skewness. Scatter Diagram, Karl Pearson's coefficient of Correlation, Rank Correlation, Concurrent Deviation.

Unit III- Probability and Probability Distribution

Probability: Concept and Definition - Relevance to Management Decisions - Sample Space and Events - Relevance of Permutations and Combinations to Probability - Rules of Probability,

Random Variables, and Concept of Probability Distribution. Theoretical Probability Distributions: Binomial, Poisson, and Normal, and problems on them. Bayes' Theorem (No derivation).

Unit IV- Sampling and Sampling Distribution and Estimation

Sampling and sampling distribution: Meaning, Steps in Sampling process, Types of Sampling - Probability and non-probability Sampling Techniques. Data collection: Primary and Secondary data - Sources - advantages/disadvantages. Data collection Methods: Observations, Survey, Interview, and Questionnaire design, Qualitative Techniques of data collection. Introduction to sampling distributions, sampling distribution of mean and proportion, application of the central limit theorem, and sampling techniques. Estimation: Point and Interval estimates for population parameters in large and small samples, and determining the sample size.

Unit V- Statistical Inference and Hypothesis Testing for Decision Making

Introduction, concept in Hypothesis testing, Null and Alternative Hypothesis, Hypothesis Formulation, Testing of hypothesis, and inferences: Procedure of testing hypothesis, Type I and Type II Errors. Significance level and rejection region, Confidence Interval, Parametric tests: Z-test, t-test, F-test, Analysis of Variance - One-Way and Two-way classification. Non-parametric tests: Chi-Square test (Problems).

Unit VI- Regression Analysis and Time Series Forecasting

Introduction, Scatterplots: Graphing Relationship, Linear versus Nonlinear Relationship, Outliers, Simple Linear Regression, Least Squares Estimation, Standard Error of Estimation. The percentage of Variance Explained: R-square. Multiple Regression, Interpretations of Regression Coefficient. Forecasting Methods: An Overview, Extrapolation Models, Econometric Models, Combining Forecasts, Components of Time Series Data. Measure of Accuracy.

Text Books

- Levin, Richard, David S. Rubin. Statistics for Management. Pearson Education.
- Anderson Sweeney and William. Statistics for Business and Economics. Cengage Learning.
- Ken Black. Applied Business Statistics. Wiley Publication.
- S. Christian Albright/Wayne L. Winston, BUSINESS ANALYTICS: DATA ANALYSIS AND DECISION MAKING
- U. Dinesh Kumar, Business Analytics: The Science of Data - Driven Decision Making

Technology Management for Business (MS503)

(PCC 3 Credits 2-0-2-0)

Objective

This course will help the students to understand the basics of technology management from the perspective of its application in various business decisions.

Course Outcomes

After completing the course, the students will be able to:

- Understand the structure and components of technology in business strategy and operations.
- Apply technology management concepts to evaluate and support business decisions.
- Understand the challenges, risks, and opportunities in managing digital transformation.

Digital Transformation for Business and Digital Disruption

Concept of digital transformation, Digitization, digitalization, and business model innovation, Role of technology in competitive advantage, Digital disruption examples (ride-sharing, digital payments in India), Evaluating disruptive technologies for business.

Enterprise Systems and IT Infrastructure

Enterprise Systems overview (ERP, CRM, SCM, HRIS), Business processes supported (order-to-cash, procure-to-pay), IT Infrastructure fundamentals, Cloud computing (IaaS, PaaS, SaaS models), On-premise vs cloud - cost, scalability, reliability analysis.

Data-Based Business Decision-Making

Business data sources and types, Key reports, dashboards, and performance indicators (KPIs), Descriptive, diagnostic, and predictive analytics concepts, Data-driven decision frameworks, Common issues in data quality and interpretation, India business cases.

e-Commerce and System Design

e-Commerce business models (B2C, B2B, C2C, marketplaces), Customer journey and operations in e-commerce, Payment systems and logistics (UPI, India focus), System Design principles for managers, Business requirements gathering, Process flows and user stories.

Digital Disruption, Change Management, and Technology Risk

Advanced digital disruption impacts and responses, Technology adoption and diffusion models, Change management strategies in tech initiatives, Stakeholder analysis and resistance handling, Technology risks (cybersecurity basics, ethics, privacy), Compliance in digital era.

Reference Books

- Managing Information Technology: What Managers Need to Know, E. Turban, Linda Volonino, J. Wood, Pearson.
- Digital Transformation: Survive and Thrive in an Era of Mass Extinction, Thomas M. Siebel, RosettaBooks.
- Information Technology for Management: On-Demand Strategies for Performance, Leadership, and Innovation, Efraim Turban et al., Wiley.

Data Visualization & Modelling (MS504)

(SEC 2 Credits 1-0-2-0)

Objective

This course introduces the basic concepts of data visualization & modelling for students with essential analytical tools to understand, interpret, and communicate data-driven insights for informed decision-making. The course helps to lay strong foundations on the tools and techniques for data management and visualization. It also enhances students' ability to present complex information clearly, enabling effective communication with stakeholders.

Course Outcomes

After Completion of the Course, Student will able to:

- Understand and explain the concepts of data modelling and visualization
- Apply data modelling techniques for solving business problems using Excel and open-source tools
- Analyse business scenarios using decision models and simulations
- Evaluate different visualization techniques and choose the appropriate type for effective communication
- Create interactive dashboards and visualizations using Power BI, Tableau, and open-source tools

Unit-1: Introduction to Data-Driven Decision Making

Importance of analytics and visualization in the era of data abundance. Role of data in business strategy (strategic, tactical, operational), Structured vs unstructured data, Making sense with Data (Discussion on the descriptive statistics, measures of central tendency, deviation), Descriptive, Predictive and Prescriptive model, Telling stories with data, Dealing with resistance to data insights.

Unit-2: Data Visualization

Principles of Effective Visualization, Color theory & accessibility, Dashboard Layout & User Experience, Bar/line/area charts, Heatmaps & Tree maps, Scatterplots & Bubble charts, Time series plots, Excel/Google Sheets basics, Exploratory graphical analysis, Introduction to Open-Source Spreadsheet Tools (LibreOffice Calc, Google Sheets), Tableau / Power BI fundamentals, Intro to R (ggplot2) or Python (Matplotlib/Seaborn), KPI design aligned to strategy, Avoiding misleading graphs, Choosing the Right Chart

Unit-3: Business Modelling

What-if Analysis (Goal Seek, Scenario Manager, Data Tables), Financial Models (NPV, IRR, Payback, Break-even Analysis), Forecasting and Regression Models, Linear Programming and Solver Tool, Sensitivity and Scenario Analysis, Monte Carlo (conceptual), Models: Sales Forecasting, Market basket analysis (conceptual), Product Mix Optimization, Profit Planning, Portfolio Optimization, Marketing analysis tools for segmentation, Customer Lifetime

Value(CLV) Segmentation, Customer Churn prediction, Campaign ROI, Employee Attrition Prediction.

Unit-4: Bias, Ethics & Governance

Bias in models, Model risk & overfitting, systematic errors, KPI selection & executive reporting, Real-time vs periodic analytics, How executives read dashboards, How to present model results to senior management, Data privacy laws (e.g., GDPR, India DPDP Act basics), Responsible analytics

Text Books:

- Data Analytics and Visualization by Naresh Kumar Nagwani and Gagan Raj Gupta
- Making Sense of Data I A Practical Guide to Exploratory Data Analysis and Data Mining by Myatt, J.G. and Johnson, W.P.
- The Visual Display of Quantitative Information, by Tufte, E, R.,
- The Functional Art: An Introduction to Information Graphics and Visualization, by Alberto Cairo.

Business Communication (MS505)

(SEC 1 credit 0-0-2-0)

Objective

To make students familiar with the communication skills and techniques

Course Outcomes

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

- Understand the role and importance of business communication in professional settings.
- Apply verbal, non-verbal, and written communication effectively in organizations.
- Identify barriers to effective communication and adopt appropriate strategies to overcome them.
- Develop basic professional writing skills, including emails, resumes, and cover letters.
- Demonstrate confidence in interpersonal communication through presentations, group discussions, and interviews.

Introduction to Business Communication

Meaning and importance of business communication.

Types of Communication: Verbal, Non-verbal, Written, and Visual communication.

Process of Communication: Sender, message, channel, receiver, feedback, and noise.

Barriers to Communication: Organizational, Psychological, and Cultural.

Formal and Informal Communication in Organizations.

Oral and Interpersonal Communication Skills

Communication styles in business environments.

Effective listening and speaking skills.

Basics of public speaking and presentations.

Group communication: Meetings and group discussions.

Roleplay for workplace communication scenarios.

Written Business Communication

Principles of effective business writing.

Email writing: Format, tone, and etiquette.

Resume and cover letter preparation.

Introduction to report and proposal writing.

Common errors in business writing and remedies.

Practical Exposure

Mock group discussions.

Personal interview skills and techniques.

SWOT analysis for self-assessment of communication skills.

Basics of negotiation and persuasion.

Moderation and leadership skills in discussions.

Text Books

- Raman, Meenakshi, and Sharma, Sangeeta. Technical Communication: Principles and Practice. Oxford University Press, 2015.
- Lesikar, Raymond et al. Business Communication: Connecting in a Digital World. McGraw-Hill Education, 2014.

Reference Books

- Murphy, Herta A., Hildebrandt, Herbert W., and Thomas P. Effective Business Communications. McGraw-Hill, 2007.
- Mohan, Krishna, and Banerji, Meera. Developing Communication Skills. Macmillan India, 2009.

Marketing Management (MS506)

(PCC 3 Credits 2–0–2-0)

Objective

To introduce marketing as a functional area, develop foundational insights, and help students appreciate the significance and complexities of marketing in managerial decision making.

Course Outcomes

Students will gain conceptual clarity and practical understanding of marketing theories and applications, enabling them to excel in real-world marketing situations.

Unit 1: Introduction to Marketing; Philosophies and Approaches to Marketing; Marketing Environment; Consumer Behavior; Marketing Information System.

Unit 2: Market Segmentation; Market Targeting; Positioning; Introduction and Procedure; STP Strategy.

Unit 3: Marketing Mix Decisions; New Product Development; Branding and Packaging Decisions; Product Life Cycle.

Unit 4: Pricing Decisions; Channel Management; Retail Distribution System in India.

Unit 5: Promotion Mix; Marketing of Services; Rural Marketing; Customer Relationship Management (CRM); Electronic Marketing; International Marketing; Strategic Marketing.

Text Books

- Kotler, Philip., Keller, Kevin Lane., Koshy, Abraham., & Jha, Mithileshwar. *Marketing Management: A South Asian Perspective* (Pearson Education, 12th Edition).

References Books

- Kotler, Philip. *Marketing Management: Analysis, Planning, Implementation and Control* (Pearson Education, 12th Edition).
- McCarthy, E. Jerome. *Basic Marketing* (4Ps Framework).
- Kotler, Philip. *Chaotics*.
- Tedlibid. *Innovations in Marketing*.
- Stanton, William J. *Fundamentals of Marketing* (McGraw Hill).
- Kotler, Philip & Armstrong, Gary. *Principles of Marketing* (Pearson Education, 11th Edition).
- Kurtz, David & Boone, Louis. *Principles of Marketing* (Thomas India Edition, 2007).

Organization Design and Behavior (MS507)

(PCC 2 Credits 2-0-0-0)

Objective

To let the students be exposed to the nature and concepts of organizations behavior and culture

Course Outcome

Students will be able to

- Implement the process and will be trained for organizational challenges in future.

Introduction to Organization Theory & Design

Evolution, Definition, Organizational Effectiveness. Fundamentals of Organization Structure: Specialization, Chain of Command, Span of Control, Formalization, Centralization vs. Decentralization. Determinants of Structure: Strategy (Chandler's thesis), Size, Technology, and External Environment. Organizational Design Options: Bureaucratic Model (Weber), Behavioral Model, Functional, Divisional, and Matrix Structures.

Organizational Resilience

Managing Transformation, Adaptability and Innovation

Introduction to Organization Behavior

Concept, Nature, Characteristics, conceptual Foundations and Importance, Models of Organizational Behavior, Management Challenge, A Paradigm Shift. Relationship with other Fields. Organizational Behavior: Cognitive Framework, Behavioristic Framework and Social Cognitive, Framework. Perception and Attribution: Concept, Nature, Process, Importance. Management and Behavioral Applications of Perception. Attitude: Concept, Process and Importance. Attitude Measurement. Attitudes and Work force Diversity. Personality: Concept, Nature, Types and Theories of Personality Shaping. Personality Attitude and Job Satisfaction. Learning: Concept and Theories of Learning.

Motivation & Leadership

Concepts and Their Application, Principles, Theories, Employee Recognition, Involvement, Motivating a Diverse Workforce. Leadership: Concept, Function. Style and Theories of Leadership-Trait, Behavioural and Situational Theories.

Group Dynamics

Analysis of Interpersonal Relationship, Group Dynamics: Definition, Stages of Group Development, Group Cohesiveness, Formal and Informal Groups, Group Processes and Decision Making, Dysfunctional Groups

Organizational Power and Politics

Concept, Sources of Power, Distinction between Power, Authority and Influence, Approaches to Power, Political Implications of Power: Dysfunctional Uses of Power. Knowledge

Management & Emotional Intelligence in Contemporary Business Organization.
Organizational Change: Concept, Nature, etc, Kurt Lewin Theory of Change Conflict,
Classification of Conflict Intra, Individual. Interpersonal, Inter group and Organizational.
Resolution of conflict. Meaning and Types of Grievance and Process of Grievance Handling.
Stress: Understanding Stress and Its Consequences, Causes of Stress, Managing Stress

Reference Books

- Newstrom John W.-Organizational Behaviour: Human Behavioural Work (TataMcGrawHill,12th Edition)
- Luthans Fred-Organizational Behaviour (Tata McGraw Hill)
- McShaneL.Steven. Glinow Mary AnnVon & Sharma Radha R.-Organizational Behaviour (Tata Mc GrawHill,3rdEdition)

Entrepreneurship Development (MS508)

(HSMC 2 Credits 2-0-0-0)

Objective

This course aims to foster an entrepreneurial and innovative mind-set by enabling learners to identify business opportunities, understand business models, and apply basic startup planning tools.

Course Outcomes

Students will be able to:

- Explain fundamental concepts and types of entrepreneurship
- Analyse entrepreneurial opportunities and challenges
- Apply business model concepts to real-world ideas
- Understand the Indian startup ecosystem and government initiatives
- Demonstrate entrepreneurial thinking through experiential activities

Introduction to Entrepreneurship

Entrepreneurship: Concept, evolution, and importance; Entrepreneur vs Manager vs Intrapreneurship; Entrepreneurial mindset and competencies; Role of entrepreneurship in economic and social development.

Types of Entrepreneurship and Entrepreneurs

Types of entrepreneurship: Small business, scalable startups, social, women, rural and digital entrepreneurship; Types of entrepreneurs; Intrapreneurship and corporate entrepreneurship; Barriers to entrepreneurship in India.

Opportunity Identification and Innovation

Idea generation techniques; Opportunity identification and screening; Innovation, creativity, and design thinking basics; Problem-solution fit and market need assessment.

Business Models and Startup Planning

Introduction to business models; Value creation and value proposition; Types of business models; Business Model Canvas: components and application.

Startup Ecosystem and Institutional Support

Indian startup ecosystem; Role of incubators, accelerators, and angel investors; Government initiatives: Startup India, MSME, Make in India, Stand-Up India; Basics of funding and financial support for startups.

Text Books

- Kuratko, D. F. Entrepreneurship: Theory, Process and Practice
- Timmons, J. A. & Spinelli, S. New Venture Creation
- Osterwalder, A. & Pigneur, Y. Business Model Generation
- Prof. Bhushan Manchanda. Entrepreneurship Development: Theory, Process, Practice
- Peter F. Drucker. Innovation and Entrepreneurship

Reference Books

- Norman M. Scarborough, Jeffrey R. Cornwall, Essentials of Entrepreneurship and Small Business Management, 8th Edition, Pearson India Education Publishing Service.
- Timmons, Jerry A., and Spinelli, Stephen, 2009. New Venture Creation: Entrepreneurship for the 21st Century, 8th Edition, Boston, MA: Irwin McGraw-Hill
- Barringer Entrepreneurship: Successfully Launching New Ventures, Pearson Education Publishing 2015

Economics (MS509)

(PCC 3 Credits 3-0-0-0)

Objective

The course focuses on maximizing profitability by applying economic analysis to a wide array of business problems given the fundamental assumption of economic analysis that states people behave rationally, optimally and self-interestedly.

Course Outcomes

Students will be able to

- Demonstrate comprehensive knowledge and understanding on the basic concepts, various behaviors and nature of economics.
- Explain the elasticity of demand and supply and its influence on determination of price in the market and to understand how factors of production can be used optimally to produce goods and services.
- Gain analytical skills for understanding market structure and to demonstrate the equilibrium price output determination under different market conditions.

Economic Way of Thinking:

Fundamental Economic Concepts; Nature and Scope of Economics; Micro vs Macro Economics; Economic Systems; Approaches to Consumer Analysis: Cardinal Utility Approach, Ordinal Utility Approach.

Consumer Behavior and Demand & Supply Analysis:

Total & marginal utility; Law of diminishing marginal utility; consumer equilibrium; law of Equi-marginal utility, demand forecasting and indifference curve analysis, Law of Demand & Supply; elasticity of demand.

Production and cost decisions:

Production function, Variation of output in Short & long run; Law of Variable Proportions; Concept of cost of Production; Behaviour of Cost in short & long-run; Revenue Concept.

Market Structure and Strategy Decision:

Perfect Competition; Monopoly Competition; Monopolistic Competition; Rules of Profit Maximization, Business Cycles, Control Measures & Business decisions.

Text Books

- Economics 19th Edition by Paul A Samuelson, William D Nordhaus
- Managerial Economics: A Problem-Solving Approach, 2nd Edition, Froeb/McCann, (South-Western, 2010).
- Microeconomics (Global Edition), 8th ed., Robert S. Pindyck & Daniel L. Rubinfeld, Pearson/Prentice Hall.
- Managerial Economics, 4th ed., Ivan Png, Routledge

Reference Books

- Charles Wheelan, *Naked Economics - Undressing the Dismal Science*, Norton
- Steven E. Landsburg, *Armchair Economist*, Free Press
- Tim Harford, *The Undercover Economist*, Abacus
- Robert Frank, *The Economic Naturalist*, Basic Books
- Avinash Dixit and Barry Nalebuff, *Thinking Strategically*, Norton
- Avinash Dixit and Barry Nalebuff, *The Art of Strategy*, Norton
- Pindyck-Rubinfeld “Microeconomics” (8th edition)

Course Curriculum

MBA

SEMESTER 2

PCC: Program Core Course, PEC: Program Elective Course, SEC: Skill Enhancement Course
HSMC: Humanities, Social Science, and Management Course, ELC: Experiential Learning Course

Corporate Finance (MS510)

(PCC 3 Credits 2-0-2-0)

Objective

The primary objective of this course is to acquaint students with the fundamentals of corporate finance. The course aims at introducing them to the principles of financial decision-making in corporations including investment decisions, financing decisions, and dividend policy. It includes discussions on valuation techniques, capital budgeting, cost of capital, and capital structure theories.

Course Outcomes

Students will be able to

- Gain a comprehensive understanding of corporate financial management and understand various financing and investment decisions.
- Analyze and evaluate investment opportunities using capital budgeting techniques and will assess risk and return in financial decision-making.
- Demonstrate the ability to determine optimal capital structure and dividend policies for corporations.

Introduction, Time Value of Money and Capital Budgeting

Introduction to financial management, Conceptual Framework of Risk and Return, Concept of Time Value of Money, Bond and Stock valuation, Capital Budgeting Process, Project Cash Flow Estimation, Investment Evaluation Criteria – Discounting and Non-Discounting criteria.

Cost of Capital and Capital Structure

Concept and Importance of Cost of Capital, Dividend Growth Model and CAPM, Weighted Average Cost of Capital (WACC), Capital Structure Concepts, Operating Leverage, Financial Leverage, EBIT-EPS Analysis, Capital Structure Theories - Net Income Approach, Modigliani-Miller Theorem (with and without taxes), Trade-off Theory, Pecking Order Theory, Agency Cost, Financial Distress.

Working Capital Management and Dividend Decision

Concepts of Working Capital, Operating Cycle, Determinants of Working Capital, Cash Management, Receivables Management, Inventory Management, Dividend Policy Concepts, Forms of Dividends, Dividend Theories, Factors Affecting Dividend Policy.

Emerging Technologies in Finance: Blockchain applications, AI-driven forecasting, cybersecurity in financial systems

Text Books

- "Financial Management: Theory and Practice", Prasanna Chandra, Tenth Edition, 2019, McGraw Hill Education, ISBN 978-9353166373.
- "Fundamentals of Financial Management", J.C. Van Horne, J.M. Wachowicz, Fourteenth Edition, 2017, Pearson Education, ISBN 978-9332585690.

Reference Books

- "Principles of Corporate Finance", R.A. Brealey, S.C. Myers, F. Allen, Thirteenth Edition, 2020, McGraw Hill Education, ISBN 978-1260013900.
- "Corporate Finance", Jonathan Berk, Peter DeMarzo, Sixth Edition, 2024, Pearson, ISBN 978-0137844906

Human Resource Management (MS511)

(PCC 3 Credits 2-0-2-0)

Objective

To let students be exposed to the Human Resource Management process and techniques.

Course Outcome

Students will be able to

- implement the process and will be trained for organizational challenges in future.

Human Resources Management (HRM)

Meaning, Nature and Scope, HRM functions, objectives, Evolution. HRM in India: evolution and principles of HRD, HRD Vs. Personnel functions, Role of HR managers. Strategic HRM, Nature of Strategies and Strategic Management, Strategic Management Process-Environmental Scanning, Strategy Formulation, Implementation, and evaluation.

Digital HR and HR analytics, Artificial Intelligence, and Automation in HR, E-HRM and Technology-Enabled HR practices, Technology, Employee Experience, and Future of Work.

Human Resources Planning & Job Analysis

Definition, purposes, processes and limiting factors. HRIS, HR accounting and audit, Job Analysis- Job Description, Job Specification.

Hiring Process

The systematic approach to recruitment: recruitment policy, recruitment procedures, recruitment methods and evaluation. The systematic approach to selection: the selection procedure, the design of application form, selection methods, the offer of employment, and evaluation of process. Socialization Process

Training and Development

Purpose, Methods and Issues of Training and Management Development programmes.

Performance Appraisals and Compensations

Performance Appraisal: Definition, Purpose of appraisal, Procedures and Techniques including 360-degree Performance Appraisal, Job Evaluation. Compensation Administration: Nature and Objectives of compensation, components of pay structure in India, Incentive Payments, Prerequisites for an effective incentive system, Types and Scope of incentive scheme, Fringe Benefits.

Discipline and Grievance Procedures

Definition, Disciplinary Procedure, Grievance Handling Procedure. Nature, importance, and approaches of Industrial Relations. Promotion, Transfer and Separation: Promotion- purpose, principles, and types; Transfer reason, principles, and types; Separation-layoff, resignation, dismissal, retrenchment, Voluntary Retirement Scheme.

Text Books

- “Human Resource Management, Text and Cases”, TMH.
- Dr. Anjali Ghanekar, “Essentials of Human Resource Management”, Everest.
- Wayne. F.Cascio, Ranjeet Nambudiri, “Managing Human Resource Management”, 8th Edition, TMH

Reference Books

- Aswathappa K, Human Resource and Personnel Management, (TataMcGrawHill,5thEd.)
- RaoVSP-Human Resource Management, Text, and Cases (ExcelBooks,2ndEd.)

Operations Management (MS512)

(PCC 3 Credits 2-1-0-0)

Objective

To make students familiar with the fundamental concepts, tools, and techniques of Operations Management and to enable them to analyse, design, and improve operational systems in manufacturing and service organizations.

Course Outcomes

Students will be able to

Understand the strategic role of operations in organizations, analyse and design processes for efficiency and effectiveness, apply quantitative and qualitative tools for operational decision-making, manage quality, inventory, and supply chain activities, evaluate contemporary issues in operations including technology and sustainability.

Introduction

Introduction to operations management, evolution and scope of operations, manufacturing and service operations, operations as a source of competitive advantage, productivity concepts and measurement, operations–marketing–finance interface, role of operations manager, ethical issues in operations, sustainability in operations management.

Unit-I. Operations Strategy and Process Design

Operations strategy and competitive priorities, alignment of operations strategy with business strategy, product design and service design, new product development process, process selection decisions, product–process matrix, process mapping techniques, value stream mapping, throughput time, cycle time, Little’s Law, waiting line theory and concepts.

Unit-II. Capacity Planning and Facility Design

Capacity planning concepts and types, capacity utilization and efficiency, bottleneck analysis, overall equipment effectiveness, facility location decisions, qualitative and quantitative location models, facility layout types including product layout, process layout, cellular layout and fixed-position layout, layout design principles and considerations.

Unit-III. Quality Management and Process Improvement

Evolution of quality management, contributions of quality gurus, total quality management, cost of quality, statistical process control, control charts for variables and attributes, Six Sigma methodology and DMAIC cycle, lean operations principles, waste identification and elimination, continuous improvement practices.

Unit-IV. Inventory and Supply Chain Management

Role and types of inventories, inventory-related costs, economic order quantity model, safety stock calculation, reorder point system, single-period inventory model, multi-period inventory models, quantity discount models, fundamentals of supply chain management, supply chain coordination mechanisms, bullwhip effect, logistics and distribution management.

Unit-V. Planning, Scheduling and Digital Operations

Operations planning, aggregate planning strategies, material requirements planning, capacity requirements planning, enterprise resource planning systems, scheduling techniques in manufacturing and services, theory of constraints, digital operations management, Industry 4.0 concepts, role of artificial intelligence in operations, Internet of Things applications, automation in operations systems.

Unit-VI. Technology & Teaching Aids

Use of ERP software demonstrations, spreadsheet modelling for inventory and forecasting, simulation exercises, case study discussions, process mapping workshops, statistical software for quality control, industry videos on lean and Six Sigma, AI-based forecasting tools, guest lectures from industry professionals, classroom presentations, practical problem-solving sessions.

Text Books

- Chase, R. B., Jacobs, F. R., & Aquilano, N. J., Operations & Supply Chain Management, McGraw-Hill.
- Slack, N., Chambers, S., & Johnston, R., Operations Management, Pearson Education.

Reference Books

- Krajewski, L. J., Ritzman, L. P., & Malhotra, M. K., Operations Management, Pearson.
- Stevenson, W. J., Operations Management, McGraw-Hill.
- Goldratt, E. M. & Cox, J., The Goal, North River Press.

Business Decision Modelling (MS513)

(PCC 3 Credits 2-1-0-0)

Objective

- To gain an understanding and appreciation of the principles and applications relevant to the planning, design, and operations of manufacturing/service firms.
- To translate business problems into decision models, formulate and solve optimization problems
- To gain some ability to recognize situations in a production system environment that suggest the use of certain quantitative methods to assist in decision-making on operations management and strategy.
- To apply quantitative techniques for planning and resource allocation, analyse risk and uncertainty using probabilistic models.
- To increase the knowledge and broaden the perspective of the world in which you will contribute your talents and leadership in business operations.

Course Outcomes

The students shall be able to

- Identify and develop operations research models from the verbal description of the real system.
- Understand the mathematical tools that are needed to solve optimization problems.
- Use mathematical software to solve the proposed models.
- Develop a report that describes the model and the solving technique, analyses the results, and proposes recommendations in language understandable to the decision-making processes in Management Engineering.

Unit I

Operations Research: Uses, Scope, and Applications of Operations Research in managerial decision-making. Linear programming: Mathematical formulations of LP Models for product-mix problems; graphical and simplex methods of solving LP problems; sensitivity analysis; duality

Unit II

Assignment Models: Concept, Flood's Technique/ Hungarian method, applications including restricted, multiple assignments, and maximization objective. Transportation Models: Concept, formulation, problem types: balanced, unbalanced, restriction and maximization, Basic initial solution using North West Corner, Least Cost & VAM, Optimal solution using MODI, multiple solution case to be considered.

Sequencing Problem: Johnson's Algorithm for n Jobs and Two Machines, n Jobs and Three Machines, Two jobs and m –Machines Problems.

Unit III

Decision-making environments: Decision-making under certainty, uncertainty, and risk situations; Decision tree approach and its applications. Replacement Problem: Replacement of assets that deteriorate over time or fail suddenly.

Unit IV

Game Theory: Concept of game; Two-person zero-sum game; Pure and Mixed Strategy Games; Saddle Point; Odds Method; Dominance Method and Graphical Method for solving Mixed Strategy Game.

Queuing Theory: Characteristics of M/M/I Queue model; Application of Poisson and Exponential distribution in estimating arrival rate and service rate; Applications of Queue model for better service to the customers.

Unit V

Project Management: Rules for drawing the network diagram, Applications of CPM and PERT techniques in Project planning and control; Time-cost tradeoff. identifying critical path, Network calculations- calculating EST, LST, EFT, LFT, Slack, floats & probability of project completion in case of PERT. Network crashing: Concept of project cost and its components, time and cost relationship, crashing of CPM network.

Text Books

- Handy A. Taha, An Introduction to Operations Research, University of Arkansas, Fayetteville. Pearson Education.
- Hiller, F.S. and L.J. Lieberman: Introduction to Operations Research.

Reference Books

- Operations research by Hira Gupta, S. Chand Publication (latest Edition)
- Operations Research Theory & Applications by J K Sharma- MacMillan Publishers India Ltd. (latest Edition) Srinivasan, Operations Research, PHI.
- Wayne L Winston. Operations Research: Applications and Algorithms. Indian University, 4th edition, 2004
- An introduction to management science: Quantitative approach for decision making- Cengage Learning Anderson (latest edition)
- Barry Render, Ralph M. Stair, Jr., Michael E. Hanna, and Trevor S. Hale, Quantitative Analysis for Management, published by Pearson Education

Business Research Methods (MS514)

(PCC 3 Credits 2-0-2-0)

Objective

The primary objective of this course is to acquaint students with fundamentals of research methods. The course aims at introducing them to the basic concepts used in research and to scientific social research methods and their approach. It includes discussions on sampling techniques, research designs and techniques of analysis.

Course Outcomes

Students will be able to

- Gain a comprehensive understanding of Research Foundation and Understand various research designs and techniques.
- Identify various sources of information for literature review and data collection and will gather and analyse data using appropriate statistical tools.
- Demonstrate the ability to interpret and present research findings effectively.
- Write structured, coherent, and well-argued research reports or theses, and present research findings effectively using both written and oral communication.

Introduction to Research: Foundations of Research, Type of Research, Qualities of Researcher, Components of the Research Problem, Research Process, Research Design

Theory Building & Framework Development: Research Question, Theory Development Process, Hypothesis Development, Scale Development, Testing the Scale

Sampling & Questionnaire Development: Sampling Process and Methods, Data quality issues, Questionnaire Development techniques, Data Collection - Primary Data & Secondary Data, Method of Data Collection, Fieldwork and Data Preparation

Data Analysis and Report Writing: Quantitative and Qualitative Data Analysis, Parametric Hypothesis Testing, Non-Parametric Hypotheses Testing, Writing and presenting project report, Oral presentation of the report

Text Books

- “Research Methodology Methods & Techniques”, C. R. Kothari, Fifth Edition, 2023, New Age International Private Limited, ISBN 978-9389802559.
- “Marketing Research”, G.C. Beri, Fifth Edition, 2023, McGraw Hill Education, ISBN 978-1259004902.
- “Business Research Methods”, W.G. Zikmund, B.J. Babin, J.C. Carr, M. Griffin, Ninth Edition, 2013, Cengage India Private Limited, ISBN 978-9353503260.
- “Business Research Methods”, N. Bajpai, Second Edition, 2017, Pearson Education, ISBN 978-9332585515

Reference Books

- “Business Research Methods”, D. Cooper, P. Schindler, Eleventh Edition, 2017, McGraw Hill Education, ISBN 978-1259001857.

Artificial Intelligence for Business (MS515)

(PCC 3 Credits 2-0-2-0)

Objective

The objective of this course is to understand what is Artificial Intelligence how can it be leveraged to improve a business? How AI is currently being used to create value within businesses, and how this transformative technology can be harnessed to create new products and services. The course will also explore the societal, economic and ethical questions that arise when applying AI in business.

Course Outcomes

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

- Understand fundamental concepts of Artificial Intelligence and how AI affects business value creation
- Apply AI tools and frameworks to develop data-driven strategies in marketing, finance, operations, and HR.
- Evaluate AI-based solutions and technologies for improving managerial decision-making and organizational performance.
- Assess ethical, legal, and governance issues related to AI adoption in organizations and propose responsible AI practices.

Unit 1: Introduction to AI for business

Introduction to AI and its role in the digital economy, How AI is related with Automation and Analytics, AI ecosystem, How AI can transform business (efficiency, innovation, scalability etc.), Business models in AI, Digital business strategy, AI-business value creation.

Unit 2: AI Foundations for Managers

Machine learning, Deep learning, Natural Language Processing, Recommendation Systems, and Computer Vision. Supervised, Unsupervised learning, Gradient descent, AI powered business intelligence tools, Generative AI (ChatGPT, Copilot, Gemini, etc.), Human–AI collaboration.

Unit 3: AI for Marketing, HRM

AI in Marketing and Sales Personalization and recommendations, Customer segmentation and targeting, Sales forecasting and lead generation, AI for Human Resource Management, Scenario planning and strategic simulations, Recruitment and talent acquisition with AI, Performance evaluation and workforce planning, AI and Strategic Management, Change management and AI adoption barriers.

Unit 4: AI for Operation, Finance

AI Driven Operations, and Financial Management, Supply chain optimization and maintenance, AI powered inventory management and demand forecasting, Automation of repetitive tasks, Fraud detection and prevention, Trading and financial forecasting.

Unit 5: AI for business decision making

Machines for decisions, learning algorithms- to decision-making, the changing role of managers decision support system; Interpretability, Explainability and Decision stakes, Accuracy vs. Interpretability, Solutions and Limitations. Measuring ROI of AI investments.

Unit 6: Responsible AI: Ethics, Bias, and Regulation

Ethical challenges: bias, transparency, accountability, Responsible AI and ESG considerations, Data privacy and cyber security, Governance, and regulation, AI innovation- regulation trade off, AI project risk management.

Text Books

- Prediction Machines: The Simple Economics of Artificial Intelligence — *Ajay Agrawal, Joshua Gans & Avi Goldfarb*
- Artificial Intelligence in Business Management — *Teik Toe Teoh & Yu Jin Goh*
- Competing in the Age of AI: Strategy and Leadership When Algorithms and Networks Run the World — Marco Iansiti & Karim R. Lakhani

IT Audit & Security (MS516)

(PCC 2 Credits 2-0-0-0)

Objective

This course aims to provide students with a focused understanding of core information security concepts and essential IT audit practices from a managerial perspective. The course emphasizes protection of information assets, assessment of security risks, and evaluation of IT controls and audit processes relevant to contemporary organizations.

Course Outcomes

Students will be able to

- Understand core information security principles, threats, and control mechanisms.
- Analyse information security risks and vulnerabilities in organizational systems.
- Apply fundamental technical and administrative security controls.
- Evaluate IT controls and audit processes using a risk-based approach.

Fundamentals of Information Security

Information as an organizational asset, need for information security, confidentiality, integrity, and availability (CIA triad), basic information security terminology, components of an information security program, roles and responsibilities in information security, overview of information security governance.

Threats, Vulnerabilities, and Risk Management

Types of threats: human, technical, and environmental, vulnerabilities in information systems, threat– vulnerability–risk relationship, malware and cyber-attacks, social engineering and insider threats, fundamentals of risk management, risk identification and assessment, risk treatment options.

Information Security Controls and Technologies

Administrative, technical, and physical controls, access control mechanisms, authentication and authorization, cryptography fundamentals, network and application security basics, data security and privacy, security policies and procedures, incident response basics, business continuity and disaster recovery overview.

Introduction to IT Audit

Concept and objectives of IT audit, role of IT audit in organizations, types of IT audits, relationship between IT audit and internal audit, IT audit standards and ethics, understanding the IT environment, audit planning and scoping, risk-based IT audit approach.

IT Controls and Audit Process

IT audit lifecycle, evaluation of general IT controls: access controls, change management, and IT operations, overview of application controls, audit evidence and documentation, audit tools and techniques, use of automated audit tools.

Audit Reporting and Emerging Technology Risks

Audit findings and recommendations, audit reporting and communication, follow-up and corrective actions, audit of cloud computing and outsourced IT services, third-party and vendor risks, overview of emerging cyber risks.

Reference Books

- Whitman, M. E., & Mattord, H. J., The Basics of Information Security: Understanding the Fundamentals of InfoSec in Theory and Practice, Cengage Learning.
- McCombs, S. B., The Basics of IT Audit: Purposes, Processes, and Practical Information, Wiley.

Design Thinking & Innovation (MS517)

(SEC 1 Credit 1-0-0-0)

Objective

The course aims to equip students with the conceptual understanding and managerial capabilities to apply design thinking as a structured approach to innovation, opportunity recognition, and strategic value creation across industries.

Course Outcomes

Students will be able to

- Understand the theoretical foundations and cognitive principles underlying design thinking and innovation
- Apply design thinking frameworks to frame and solve ill-structured managerial problems
- Integrate design thinking with innovation and strategic management theories to design and evaluate innovative solutions using iterative experimentation and validation

Introduction

Design thinking as a managerial paradigm; bounded rationality and decision-making under uncertainty; wicked problems and organisational complexity; abductive reasoning and design cognition; human-centred value creation; divergent and convergent thinking; relationship between design thinking and innovation.

Design Thinking Process

Design thinking frameworks (Double Diamond and five-stage model); empathy and structured insight generation; problem framing and reframing; ideation and cognitive flexibility; visualisation and mapping techniques; rapid prototyping; experimentation and hypothesis testing; effectuation and lean validation principles

Innovation and Design Thinking

Schumpeterian innovation and types of innovation (incremental, radical, disruptive); business model innovation; dynamic capabilities and absorptive capacity; exploration and exploitation; design thinking as opportunity recognition and innovation under uncertainty; evaluation of feasibility, viability and strategic fit.

Organisation & Strategic Integration

Organisational learning and innovation culture; psychological safety and cross-functional collaboration; embedding design thinking in corporate strategy; leadership for innovation; measuring innovation performance; sustaining and scaling innovation initiatives; ethical and responsible innovation.

Reference Books:

- Tidd, J., & Bessant, J. (2021). *Managing Innovation: Integrating Technological, Market and Organizational Change*, 7th Edition, Wiley.

- Liedtka, J., King, A., & Bennett, K. (2018). *Solving Problems with Design Thinking*, Columbia University Press.
- Martin, R. L. (2009). *The Design of Business: Why Design Thinking is the Next Competitive Advantage*, Harvard Business Press.
- Burgelman, R. A., Christensen, C. M., & Wheelwright, S. C. (2017). *Strategic Management of Technology and Innovation*, 5th Edition, McGraw Hill Education.

Business Law & IPRs (MS518)

(HSMC 1 Credit 1-0-0-0)

Objective

To familiarize students with the basic principles of Indian business laws and intellectual property rights and to enable them to understand the legal and regulatory environment governing business decisions, innovation, and entrepreneurship in India.

Course Outcomes

Students will be able to

Understand key Indian business laws applicable to organizations, identify legal issues in contracts and commercial transactions in India, understand the nature and protection of intellectual property rights in India, and appreciate the role of Indian legal institutions in protecting business and innovation.

Introduction

Nature and scope of business law in India, sources of Indian business law, constitutional framework affecting business, role of judiciary, law and business ethics, relevance of business law for managers in the Indian business environment.

Unit-I. Indian Contract Law

Indian Contract Act, 1872, meaning and essentials of a valid contract, offer and acceptance, consideration, capacity of parties, free consent, legality of object, types of contracts, discharge of contract, breach of contract and remedies with business illustrations.

Unit-II. Business Regulatory Framework in India

Overview of Companies Act, 2013, corporate governance in India, Consumer Protection Act, 2019, Competition Act, 2002, negotiable instruments in brief, Information Technology Act, 2000, legal aspects of e-commerce and digital transactions in India.

Unit-III. Intellectual Property Rights in India

Concept and importance of IPR, Indian Patent Act, 1970, Trademarks Act, 1999, Copyright Act, 1957, Industrial Designs Act, 2000, Geographical Indications of Goods (Registration and Protection) Act, 1999, infringement and remedies, role of IPR in startups, MSMEs and innovation in India.

Unit-IV. Technology & Teaching Aids

Use of government legal portals for Bare Acts, case law discussion from Indian courts, online trademark and patent search demonstration, MCA portal familiarization, case study discussions, classroom debates on corporate governance, practical illustrations of contract drafting, guest lectures from legal professionals.

Text Books

- N. D. Kapoor, *Business Law*, Sultan Chand & Sons.
- Avtar Singh, *Law of Contract and Commercial Law*, Eastern Book Company.
- P. Narayanan, *Intellectual Property Law*, Eastern Law House.

Reference Books

- M. C. Kuchhal & Vivek Kuchhal, *Business Law*, Vikas Publishing.
- Government of India, *Manual of Intellectual Property Rights*, DPIIT.
- Bare Acts: Indian Contract Act, 1872; Companies Act, 2013; Patent Act, 1970.
- W. R. Cornish et al., *Intellectual Property: Patents, Copyright, Trademarks and Allied Rights*.

Sources (Indian Context)

- Ministry of Law and Justice, Government of India
- Controller General of Patents, Designs & Trade Marks (CGPDTM)
- Ministry of Corporate Affairs (MCA)

Course Curriculum

MBA

SEMESTER 3

PCC: Program Core Course, PEC: Program Elective Course, SEC: Skill Enhancement Course
HSMC: Humanities, Social Science, and Management Course, ELC: Experiential Learning Course

Strategic Management (MS601)

(PCC 3 Credits 2-0-2-0)

Objective

To develop a theoretical and practical understanding of Strategic planning and control by exploring current developments in the corporate strategic paradigm.

Course Outcomes

Students will be able to

- Develop the ability to analyse complex business environments and formulate effective strategies.
- Gain insights into strategic decision-making and its impact on organisational success.
- Understand how to align resources and capabilities with competitive strategies.

Introduction To Strategic Management

Basic Concepts in Strategic Management, Corporate Governance and Social Responsibility, vision and mission, Levels of strategy, Competitive Advantage, Resource allocation

Scanning the Environment

Definition and Importance, Types of Factors (Internal: Organisational structure; External: Economic, political, social, technological, legal), Techniques (SWOT Analysis, Competitive Analysis), Tools (Data analytics, Business intelligence, social media monitoring), Challenges, Integration into Strategic Decision-Making.

Strategy Formulation

Situation Analysis and Business Strategy, Strategy Formulation: Corporate Strategy, Strategy Formulation: Functional Strategy and Strategic Choice (Aligning functional areas, developing functional strategies, Evaluating strategic options).

Strategy Implementation and Control

Strategy Implementation: Organising for Action (Roles, Communication, Resource alignment), Staffing and Directing (Recruitment, Leadership, Performance), Evaluation and Control (Metrics, Monitoring, Feedback), Managing Technology and Innovation (Adoption, Efficiency, Change management), Case Analysis Suggestions (Stakeholders, Decisions, Implementation evaluation).

Reference Books

- Ansoff, I. (1965). Corporate Strategy. McGraw-Hill.

- David, F. R. (2011). Strategic Management: Concepts and Cases (13th ed.). Pearson.
- Day, G. S., & Reibstein, D. J. (2004). Wharton on Dynamic Competitive Strategy. Wiley.
- Glueck, W. F., & Jauch, L. R. (1984). Business Policy and Strategic Management (5th ed.). McGraw-Hill.
- Kaplan, R. S., & Norton, D. P. (1996). The Balanced Scorecard: Translating Strategy into Action. Harvard Business School Press.

Business & IT Consulting (MS602)

(PCC 2 Credits 1-0-2-0)

Objective

Build practical and conceptual capability in business and IT consulting, including ethics, client/stakeholder management, structured problem solving, IT strategy/governance, ITSM, process improvement, and professional deliverables.

Course Outcomes

Students will be able to

Explain the consulting industry, value proposition, service models, and ethics; manage engagements through client communication and stakeholder coordination; apply strategic frameworks and hypothesis-driven analysis to develop recommendations; design IT solutions using architecture, governance, security, risk, vendor evaluation, and roadmaps; and produce professional reports, business cases, and implementation plans.

UNIT 1: Basic Consultancy

Introduction to business and IT consulting (definition, scope, evolution, value proposition, business models, service offerings); ethics, professional standards, and confidentiality; consulting engagement lifecycle and team roles; client and stakeholder management with core consulting communication skills; consulting industry landscape; career pathways, recruiting (case and fit), skill development, personal branding, and exit options.

UNIT 2: Types of Consultancy

Types of consulting: strategy, operations, technology, HR, specialized consulting; specialized domains: supply chain/operations; financial advisory (M&A, restructuring, planning); HR/OD; marketing/sales; risk/compliance; sustainability/ESG; healthcare/life sciences; government/public sector; start-ups/SMEs; Industry 4.0/manufacturing.

UNIT 3: Business Consultancy

Strategic frameworks (SWOT, Five Forces, Value Chain, PESTLE, BCG, 7S, Ansoff, Blue Ocean) and competitive advantage assessment; problem scoping and hypothesis-driven analysis using data collection, interviews, and issue/logic trees; solution and recommendation development; consulting deliverables including reports, executive summaries, business cases (ROI/cost-benefit), data visualization, and implementation and change roadmaps.

UNIT 4: IT Consultancy

IT consulting scope; IT strategy alignment; infrastructure planning; enterprise architecture and governance; technology roadmaps; emerging technologies and legacy modernization; security, risk, and vendor evaluation; ITSM and ITIL 4 (service lifecycle, SLAs/OLAs, CSI, tools/automation); consulting project management; process improvement using BPM/BPR, Lean, Six Sigma (DMAIC), RPA, benchmarking, and ERP integration.

Textbooks

- Wickham, L., & Wilcock, J. (2021). *Business and Management Consulting: Delivering an Effective Project* (6th ed.). Pearson Education.
- Block, P. (2011). *Flawless Consulting: A Guide to Getting Your Expertise Used* (3rd ed.). Jossey- Bass/Pfeiffer.
- Axelos. (2019). *ITIL® Foundation, ITIL 4 Edition*. TSO (The Stationery Office).
- Porter, M. E. (2008). *Competitive Strategy: Techniques for Analysing Industries and Competitors*. Free Press.
- Kotler, P., & Keller, K. L. (2016). *Marketing Management* (15th ed.). Pearson Education.
- Ross, J. W., Beath, C. M., & Mocker, M. (2019). *Designed for Digital: How to Architect Your Business for Sustained Success*. MIT Press.
- Rogers, D. L. (2023). *The Digital Transformation Roadmap: Rebuild Your Organization for Continuous Change*. Columbia Business School Publishing.

Workshop on Advanced Communication Skills (MS603)

(SEC 1 Credit 0-0-2-0)

Objective

Experiential Learning

Workshop Outcomes

- Apply advanced deductive and inductive reasoning
- Demonstrate leadership communication
- Prepare professional CVs and documents
- Manage business documents effectively

Module 1: Advanced Communication Logic (4 Hours)

- Deductive and inductive managerial communication
- Activity: Case-based solution drafting

Module 2: Leadership Communication (4 Hours)

- Leadership communication styles
 - Meeting and negotiation communication
- Activity: Leadership role-play

Module 3: Hands-on Session (3 Hours)

- Diction Correction, Gesture & Posture Correction.
- PPT and Poster Presentation
- Role play, Dramatic/Cutout, Handouts
- Monologue/Dialogue delivery and Skit.
- Compering and Hosting
- Debate on Different Topics
- Ted-Talks and Story/Script Composition
- Interview Role Play
- Group Discussion
- Extempore Preparation
- Quiz Competition

Assessment:

- Practical assignments – 50%
- Role-play – 50%
- Participation – 100%

Reference Books

- Lesikar, Raymond et al. *Business Communication: Connecting in a Digital World*. McGraw-Hill Education.
- Raman, Meenakshi, and Sharma, Sangeeta. *Technical Communication: Principles and Practice*. Oxford University Press.

Reference TED Talks

- Simon Sinek – *How Great Leaders Inspire Action*
- Amy Cuddy – *Your Body Language May Shape Who You Are*
- Julian Treasure – *How to Speak So That People Want to Listen*
- Chris Anderson – *TED's Secret to Great Public Speaking*

Teaching Aids

- Case studies and real-world business scenarios
- Role-play simulations and group activities
- PowerPoint presentations and video-based learning (TED Talks)
- Peer feedback and instructor-led mentoring

Business Ethics and Corporate Governance (MS604)

(PCC 2 Credits 2-0-0-0)

Objective

To understand ethics, corporate governance and CSR, and enable them to apply ethical and sustainable practices in managerial decision - making.

Course Outcomes

Students will be able to

- Understand the concepts of business ethics and apply ethical theories to managerial decision-making.
- Comprehend the conceptual framework and significance of corporate governance.
- Analyse the role of key factors and mechanisms in effective corporate governance.
- Explain and differentiate various corporate governance theories.
- Critically examine ethical and governance issues in business contexts.
- Evaluate the impact of good corporate governance in a globalized economy.
- Recognize the importance of stakeholder interests in business decisions.
- Demonstrate ethical behaviour to promote stakeholder welfare and corporate responsibility.

Introduction to Business Ethics

Definition of Ethics – Objectives, nature and sources of ethics – Business Ethics – Nature, Importance - Factors influencing Business Ethics. Values, Norms and Beliefs. Ethics vs Morals; Ethical Codes – Ethical theories - Teleological, Deontological, natural and Kantian - Need for ethical behaviour - Ethical dilemmas - Ethical Analysis (Hosmer Model).

Workplace and Consumer Ethics

Ethical issues in employer – employee relation - Discrimination at work place – Employee privacy - Ethical issues in marketing, advertising - Ethical challenges under globalization.

Corporate Governance Concepts and Theories

Corporation - Key Players (Stakeholders) – Inter-linkages - Historical perspective – Corporate governance – Global and Indian Perspective - Theory and practices of Corporate Governance; Structure of Corporate Governance (Agent, Steward, Stakeholder and sociological Theories)

Models and Implementation of Corporate Governance

Governance models: Anglo–Saxon - Japanese - German Model (Based on Ownerships, Composition of Board of directors, Shareholders right, Regulatory Framework, Disclosures) - Regulatory bodies (Global View) - Legal Obligations and Compensation Structures from Indian Perspective (Roles of independent Directors and Auditors)

Text Books:

- Fernando A. C., Muraleedharan K. P., Satheesh E. K. (2022), Business Ethics and Corporate Governance, 3rd Edition, Pearson Education.
- Miller, D. E., & Shaw, W. H. (2024). *Business Ethics: A Textbook with Cases* (10th ed.). Wadsworth/Cengage.
- V. Balachandran, V. Chandrasekaran (2011), Corporate Governance, Ethics and Social Responsibility, 2nd edition, Prentice Hall.
- Elizabeth V. Henderson, Mariela McIlwraith (2012), Ethics and Corporate Social Responsibility in the Meetings and Events Industry, 1st edition, Wiley.
- Tricker, R. I. (2019). Corporate governance: Principles, policies, and practices (4th ed.). Oxford University Press.
- Larcker, D. F., & Tayan, B. (2025). Corporate governance matters: A closer look at organizational choices and their consequences (4th ed.). Pearson Education.

Course Curriculum

MBA

SEMESTER 4

PCC: Program Core Course, PEC: Program Elective Course, SEC: Skill Enhancement Course
HSMC: Humanities, Social Science, and Management Course, ELC: Experiential Learning Course

IT Product Management (MS606)

(PCC 2 Credits 2-0-0-0)

Objective

The objective of the course is to equip students with the knowledge and skills necessary to effectively define, develop, manage, and launch successful IT products and digital solutions.

Course Outcomes

Students will be able to

- Develop understanding of Capability Maturity Model Integration (CMMI) and Go-to-Market (GTM) strategies
- Plan, develop, and launch successful IT products and solutions
- Apply product planning principles and manage customer journey and product performance

Foundations of IT Product Management

Product Management Concepts, Definition and Scope of IT Product Management, Functional Management vs Product Management, Role and Responsibilities of Product Manager, Product Orientation and Market Orientation, Product Lifecycle Thinking, Process Levels in Product Management, Strategic Responsibility of Product Managers, Product Planning and Customer Journey Perspective.

IT Product Organization and Strategy

Recruitment and Roles of Product Managers, Organizational Integration of Product Management, Strategic and Operational Product Management Structures, Cross-Functional Coordination between Product, Engineering, and Business Functions, Product Ownership and Governance Structures, Assignment to Technical Functions, Product Team Structures in IT Organizations, Organizational Alignment for Digital Product Strategy.

Capability Maturity and Digital Product Development (CMMI)

Capability Maturity Model Integration (CMMI): Concept and Role in IT Product Organizations, Process Maturity in Digital Product Development, Maturity Levels in Product Organizations (Initial, Managed, Defined, Quantitatively Managed, Optimizing), Organizational Capability Assessment, Integration of Product, Engineering, and Operations Functions, Requirements and Product Backlog Management, Product Verification and Validation, Risk Management in Technology Product Development, Measurement and Analytics for Product Performance, Product Governance in Agile Environments, Continuous Improvement and Capability Roadmapping for IT Product Development.

Agile Execution and Product Performance

Product Performance Measurement and Key Performance Indicators (KPIs), Software and Digital Product Assessment Metrics, Agile, Scrum and Lean Product Management Principles,

Software Project Management and Product Development Lifecycle, Sprint Planning, Backlog Management and Release Governance, Product Quality and Technical Performance Metrics, Customer Usage and Product Adoption Analytics, OKRs and KPI Dashboards for Product Evaluation, Cross-Functional Performance Monitoring in Agile Teams, Case Studies in IT and Software Product Management.

Reference Books

- Lehmann, Donald R., and Russell S. Winer. *Product Management*, 4th Edition, Tata McGraw-Hill.
- Gorchels, Linda. *The Product Manager's Handbook: The Complete Product Management Resource*, Tata McGraw-Hill.
- Cagan, Marty. *INSPIRED: How to Create Tech Products Customers Love*, 2nd Edition, Wiley.
- Ries, Eric. *The Lean Startup: How Today's Entrepreneurs Use Continuous Innovation to Create Radically Successful Businesses*, Crown Business.
- Doerr, John. *Measure What Matters: How Google, Bono, and the Gates Foundation Rock the World with OKRs*, Portfolio.

Sustainability and Social Audit (MS607)

(HSMC 2 Credits 2-0-0-0)

Objective

To provide an understanding of sustainability principles, social audit processes, and their integration with corporate responsibility, enabling students to evaluate and implement sustainable and socially accountable practices in organizations.

Course Outcomes

Students will be able to

- Define and explain key concepts of sustainability, social audit, and ESG (Environmental, Social, Governance) frameworks.
- Apply principles of sustainability reporting and assurance to real-world business scenarios.
- Understand the methodologies, tools, and standards for conducting social and sustainability audits.
- Analyze the role of stakeholders, regulatory frameworks, and ethical considerations in sustainability practices.
- Critically evaluate global and Indian perspectives on sustainability reporting, including BRSR and emerging mandates.
- Assess the impact of social audits on organizational accountability, stakeholder welfare, and long-term value creation.
- Differentiate between various sustainability models, assurance processes, and risk management approaches.
- Demonstrate skills in identifying material issues, measuring performance, and recommending improvements for sustainable business practices.

Introduction to Sustainability and Social Audit

Definition and scope of sustainability – Triple Bottom Line (People, Planet, Profit) – Evolution and importance of sustainability in business – Social Audit: Concept, objectives, and principles – Distinction between financial audit, social audit, and sustainability audit – ESG framework – Need for accountability and transparency in modern organizations – Ethical foundations and stakeholder theory.

Sustainability Reporting and Frameworks

Global standards (GRI, IFRS S1/S2, TCFD, Integrated Reporting) – Indian context: Business Responsibility and Sustainability Reporting (BRSR), SEBI mandates – Materiality assessment – Key performance indicators (KPIs) for environmental, social, and governance factors – Challenges in measurement and disclosure – Role of sustainability in corporate strategy and decision-making.

Social Audit: Process and Methodologies

Steps in conducting social audits – Tools and techniques (stakeholder engagement, impact assessment, surveys) – Social audit standards and guidelines – Assessing social impacts (human rights, labor practices, community welfare, diversity) – Case studies on social audits in NGOs, corporates, and public sector – Ethical dilemmas and biases in social auditing.

Sustainability Assurance, Risk Management, and Implementation

Assurance processes and frameworks – Role of auditors and independent assurance – Sustainability risk identification and management – Climate-related risks, circular economy, and emerging issues – Regulatory bodies and compliance (global and Indian) – Best practices, limitations, and future trends – Integration of sustainability into governance and corporate responsibility.

Text Books:

- Fernando, A. C. (Recent ed.). Business Ethics and Corporate Governance. Pearson Education. (Relevant chapters on sustainability and CSR).
- Tricker, R. I. (Recent ed.). Corporate Governance: Principles, Policies, and Practices. Oxford University Press.
- Jain, Trilok Kumar. Social and Sustainability Audit. (Comprehensive guide on frameworks and practices).

Course Curriculum

MBA

Elective Baskets

Basket 1 : Marketing Management

PCC: Program Core Course, PEC: Program Elective Course, SEC: Skill Enhancement Course
HSMC: Humanities, Social Science, and Management Course, ELC: Experiential Learning Course

Advertising (MS609)

(PEC 3 Credits 2-0-2-0)

Objective

The course explains the importance of advertising and the expanding role of social media in modern marketing. Advertising is now central to most successful marketing strategies, and the rise of integrated social media planning demands thorough professional competence. Through case studies, discussions, and practical exercises, students will learn how to connect business goals with social media strategies, platforms, and tactical execution.

Course Outcomes

Students will be able to

Understand how advertising decisions influence consumer behaviour and organizational performance, create persuasive and ethically sound ad messages, select appropriate media channels based on cost and impact, and measure campaign effectiveness using industry-standard metrics. They should also be capable of collaborating with agencies, interpreting market trends, and applying analytical tools to optimize campaigns—skills that translate directly into roles in brand management, digital marketing, media planning, and strategic communication.

Course Plan

Unit 1: Concept, definition, and objectives of advertising; Social, economic, and legal implications of advertising; Setting advertising objectives; Advertising agencies: selection and remuneration; Advertising campaign; Operations and structure of news media companies; Media business and new technology; Current trends in media business; Legal issues in media business.

Unit 2: Message concept and development; Types of advertising; Layout, design, appeal, and copy structure; Advertisement production for print, radio, television, and web media.

Unit 3: Media concept, need, and scope; Types and choice of media; Media vehicles; Reach, frequency, and impact of advertisements; Media planning, scheduling, and strategy.

Unit 4: Cost of advertisements in relation to sales; Revenue and expenditure in media; Buying and selling space and time in media; Preparation and selection of advertising budget methods.

Unit 5: Media research; Testing validity and reliability of advertisements; Measuring advertising impact; Testing advertising effectiveness; DAGMAR; TRP and audience profiles; Ethical and social issues in advertising.

Reference Books

- Batara, Akker & Mayers. *Advertising Management*.
- *Ogilvy on Advertising*.
- Kenneth Clow & Donald Baack. *Integrated Advertising, Promotion and Marketing Communication*. Prentice Hall of India, 2003.
- Kruti Shah. *Advertising and Integrated Marketing Communications*, 2017.
- George E. Belch & Michael A. Belch. *Advertising and Promotion*. McGraw Hill, 1998.
- George Sylvie, Jan Wicks LeBlanc, C. Ann Hollifield, Stephen Lacy, Ardyth Sohn Broadrick. *Media Management: A Casebook Approach*.

Consumer Analytics (MS610)

(PEC 3 Credits 2–0–2-0)

Objective

The course introduces students to the principles, tools and applications of consumer analytics. It focuses on using data to understand consumer behavior, optimize marketing decisions, personalize consumer experiences and support strategic business outcomes.

Course Outcomes

Students will be able to

- Understand key concepts and analytical techniques used in consumer analytics.
- Evaluate data sources and segmentation strategies for consumer insight generation.
- Apply predictive analytics, sentiment analysis and consumer profiling.
- Develop data-driven decision-making skills for marketing strategies.
- Map consumer journeys and design personalized experiences using analytics tools.
- Assess campaign effectiveness, consumer retention metrics and optimization techniques.
- Recognize ethical issues, privacy concerns and responsible data-use practices in analytics.

Course Plan

Unit 1: Introduction to consumer analytics; Fundamental principles, role and importance of data-driven understanding of consumers; Applications in business decision-making.

Unit 2: Statistical and analytical approaches: Problem modeling; Feature identification; Component analysis; Model validation and testing; Conjoint analysis; Correlation and regression; Trend analysis; Time series forecasting; Clustering and cohort analysis; Classification techniques.

Unit 3: Marketing management process and consumer analytics; Linking marketing strategy to consumer analytics and insights; Strategic marketing approaches; Competitor analysis through analytics.

Unit 4: Consumer insights: Consumer preferences, problem solving, reference group influence, demographic and psychographic drivers; Consumer Lifetime Value (CLV); Relationship between spending, acquisition and retention; Market basket analysis; RFM analysis; Sentiment and content analysis.

Unit 5: Consumer segmentation: Cluster analysis, collaborative filtering and classification trees; Applications of consumer analytics in advertising, retailing, digital and social media marketing.

Text Books

- Winston, Wayne L. (2014). *Marketing Analytics: Data-Driven Techniques with Microsoft Excel*. Wiley.
- Malhotra, Naresh (2015). *Marketing Research: An Applied Orientation*, 7th Edition. Pearson Education.
- Vandana Ahuja. *Digital Marketing*. Oxford University Press, 2015.

Reference Books

- Damian Ryan (2014). *Understanding Digital Marketing: Marketing Strategies for Engaging the Digital Generation*. Kogan Page Publishers.

Consumer Behavior (MS611)

(PEC 3 Credits 2-0-2-0)

Objective

The course examines how consumers think, feel and act in different buying situations. It explores cultural, social, personal and psychological influences on consumer decisions and enables students to design marketing strategies that create and enhance customer value.

Course Outcomes

Students will be able to

Interpret consumer decision processes, analyze motivational and perceptual factors, apply attitude and learning models, and design customer-focused marketing strategies based on behavioral insights.

Course Plan

Unit 1: Consumer behavior: definition and scope; Customer value, satisfaction and retention; Focused marketing; Models of consumer behavior (Nicosia model, Howard–Sheth model, etc.); Consumer benefits and evaluative criteria; Decision heuristics.

Unit 2: Consumer motivation; Needs and goals; Identifying purchase motives; Motivation research; Defense mechanisms; Personality; Consumer innovativeness; Dogmatism; Cognitive personality traits; Self-image and self-concept.

Unit 3: Consumer learning; Classical and instrumental conditioning; Information processing; Perceptual mapping; Attitude formation—Tri-component attitude model, Multi-attribute attitude model; Attribution; Reference groups and brand communities; Family life cycle; Family decision-making process.

Unit 4: Consumer perception; Weber’s Law; Selective perception—figure and ground, grouping, closure; Perceptual distortion; Perceived risk and perceived quality; Opinion leadership; Surrogate buyers; Diffusion of innovation; Adopter categories and adoption process.

Unit 5: Purchasing and post-purchase behavior; Store location, design and physical facilities; Store-specific shopper profiles; In-store behavior; Usage segmentation; Brand and product users; Loyalty and situation segmentation; Post-purchase satisfaction and dissatisfaction; Complaint behavior.

Reference Books

- Jay D. Lindquist & M. Joseph Sirgy. *Shopper, Buyer and Consumer Behavior*. Biztantra, 2007.
- Del I. Hawkins, Roger J. Best, Kenneth A. Coney & Amit Mookerjee. *Consumer Behavior: Building Marketing Strategy*, 9/e. Tata McGraw-Hill, 2007.
- Leon G. Schiffman & Leslie Lazar Kanuk. *Consumer Behavior*. PHI Learning, 2008.
- David L. Loudon & Albert J. Della Bitta. *Consumer Behavior*. Tata McGraw-Hill, 2007.

- Michael R. Solomon. *Consumer Behavior*. PHI Learning, 2009.
- Wayne D. Hoyer, Deborah MacInnis & Dasgupta. *Consumer Behavior*. Biztantra, 2008.
- Leon Schiffman & Leslie Kanuk. *Consumer Behaviour*, 10/e. Pearson, 2010.
- Jay D. Lindquist & Joseph Sirgy. *Consumer Behavior*. Cengage Learning.
- David L. Loudon & Della Bitta. *Consumer Behavior*, 4/e. McGraw-Hill.

Digital Marketing (MS612)

(PEC 3 Credits 2-0-2-0)

Objective

In the era of digital transformation, technology has created new opportunities and challenges for marketing. While the core principles remain constant, digitalization, individualization, networking, and informed consumers have reshaped marketing practice. Digital marketing offers innovation, affordability, measurability, and targeted engagement. It has also expanded professional opportunities for digital marketers, analysts, designers, and developers.

Course Outcomes

By the end of the course, students will be able to explain core digital marketing concepts and metrics, design and analyze data-driven campaigns using analytical tools and experiments, plan and optimize SEO/SEM and mobile/social/email strategies, and apply attribution and marketing mix modelling to allocate budgets and improve digital marketing performance.

Course Plan

Unit 1: Fundamentals of digital marketing; Key performance metrics such as Customer Acquisition Cost (CAC), Customer Lifetime Value (CLV), ROI, churn, conversion rate, and consumer segmentation; Understanding online customer journeys and digital touchpoints.

Unit 2: Analytical foundations for digital marketing; Application of regression analysis, A/B testing, and experimental design; Using data-driven insights for campaign optimization and decision making.

Unit 3: Search Engine Optimization (SEO) and Search Engine Marketing (SEM); On-page and off-page SEO; Keyword research; Search algorithms; Pay-per-click advertising; Quality score; Building effective search campaigns.

Unit 4: Mobile marketing and social media analytics; Mobile consumer behaviour; App-based marketing strategies; Measuring engagement, reach, impressions, and sentiment; Dashboards and social listening tools for performance analysis.

Unit 5: Email marketing strategies; Crafting effective email content; Personalization and automation; Lead nurturing; Measuring email performance using open rate, click-through rate, conversion rate, and list health.

Unit 6: Multi-channel attribution and marketing mix modelling; Understanding customer paths across channels; Attribution models (first-touch, last-touch, linear, time-decay, algorithmic); Basics of marketing mix models and interpreting insights for budget allocation.

Reference Books

- Godfrey Parkin. *Digital Marketing: Strategies for Online Success*.
- Tuten & Solomon. *Social Media Marketing*.
- Avinash Kaushik. *Web Analytics 2.0: The Art of Online Accountability & Science of Customer Centricity*.
- Calvin Jones & Damian Ryan. *Understanding Digital Marketing: Marketing Strategies for Engaging the Digital Generation*.

International Marketing (MS613)

(PEC 3 Credits 2-0-2-0)

Objective

To provide students with an understanding of how marketing decisions operate in an international environment. The course examines economic, political, legal and cultural forces affecting international markets, and builds analytical skills for developing marketing plans, strategies and mix decisions across global markets. It extends the understanding of marketing management into the international domain.

Course Outcomes

Students will be able to

Analyze international market environments, evaluate entry strategies, design global product, pricing and distribution decisions, and prepare international marketing plans aligned with global opportunities and constraints.

Course Plan

Unit 1: Scope and significance of international marketing; Strategic importance of global marketing; Differences between domestic and international marketing; Need for international trade and trends in foreign trade; International market environment—economic, social, cultural, political, legal and regulatory dimensions; Technological environment; Business customs in international markets.

Unit 2: Identifying and targeting international market opportunities; Regional market characteristics; Marketing in transitional and developing economies; International segmentation and targeting; Market entry strategies—indirect exporting, domestic purchasing, direct exporting, foreign manufacturing without direct investment, foreign manufacturing with direct investment; Entry strategies of Indian firms.

Unit 3: International product management; Product positioning in global markets; Product saturation levels; International product life cycle; Strategic alternatives in geographic expansion; New product development for international markets; Product–culture interface; Branding challenges in global markets.

Unit 4: International marketing channels; Distribution structures and patterns; Factors influencing channel choice; Challenges in international distribution management; Selection of foreign country market intermediaries; Management of international physical distribution.

Unit 5: Pricing decisions in international markets; Environmental influences on pricing; Grey market goods; Transfer pricing; Global pricing strategies; Global advertising and branding; Selecting advertising agencies; Personal selling, sales promotion, public relations, publicity and sponsorship in international contexts; Export marketing, export policy decisions, EXIM

policy of India, export costing and pricing, export procedures and documentation, export incentives and assistance in India.

Text Books

- Philip R. Cateora. *International Marketing*. Tata McGraw-Hill.
- Justin Paul. *International Marketing: Text and Cases*.
- Satish B. Mathur. *International Marketing Management*.
- Isobel Doole & Robin Lowe. *International Marketing Strategy: Analysis, Development and Implementation*.

Reference Books

- Philip R. Cateora & John L. Graham. *International Marketing*. Tata McGraw-Hill, 2002.
- Sak Onkvisit & John J. Shaw. *International Marketing: Analysis and Strategy*. Prentice-Hall of India, 2000.
- Isobel Doole & Robin Lowe. *International Marketing Strategy*, 2nd Edition, Thomson Learning, 2003.
- Subhash C. Jain. *International Marketing*, 6th Edition, South-Western, 2001.
- Vern Terpstra & Ravi Sarathy. *International Marketing*, 8th Edition, Harcourt Asia, 2001.
- Keegan. *Global Marketing Management*, 7th Edition, Pearson Education, 2003.

Marketing Technology (MS614)

(PEC 3 Credits 2-0-2-0)

Objective

This course introduces students to the fast-growing field of Marketing Technology (MarTech), where technology, analytics, and automation combine to transform how marketing is planned, executed and measured. It covers digital tools, data-driven decision-making, and emerging technologies such as AI, machine learning, automation, AR/VR, blockchain and Web 4.0 innovations. The course also focuses on customer engagement, personalization and performance optimization through technology.

Course Outcomes

To equip students with the technological, analytical and automation skills required to design, measure and optimize modern digital marketing systems.

By completing this course, students will be able to

- Understand the scope and role of MarTech in modern marketing ecosystems.
- Identify and evaluate key marketing technologies and platforms.
- Apply data-driven techniques to solve marketing problems.
- Design automation workflows to improve marketing efficiency.
- Map omnichannel customer journeys using MarTech tools.
- Analyze emerging MarTech trends and their strategic implications.
- Integrate marketing technologies into business processes, automate key functions, interpret digital analytics, design personalized customer journeys, and evaluate the strategic value of emerging MarTech innovations.

Course Plan

Unit 1: Introduction to MarTech; Evolution of marketing technology; Digital transformation in marketing; Overview of the MarTech landscape; Structure and components of the MarTech ecosystem.

Unit 2: Marketing technologies and tools: CRM–CMS integration; Analytics and automation platforms; Role of CRM in lead management and customer data handling; Voice search marketing; AR/VR/XR applications; Blockchain in advertising; Web 4.0 technologies; AI-driven applications in marketing.

Unit 3: Marketing process automation: Workflow automation; Critical process monitoring systems; Email automation; Social media scheduling; Campaign optimization; Chatbots and conversational AI; Recommender systems; Using data and AI to drive marketing initiatives.

Unit 4: Customer journey mapping: Customer touchpoints; Omnichannel engagement; UX and CX optimization; Personalizing and integrating customer journeys; Customer personas; Hyper-personalization strategies; Digital twins and avatar-based marketing.

Text Books

- Kotler, P., Kartajaya, H., & Setiawan, I. (2021). *Marketing 5.0: Technology for Humanity*. Wiley.

- Scott, B. (2018). *Hacking Marketing: Agile Practices to Make Marketing Smarter, Faster, and More Innovative*.
- Järvinen, J., & Karjaluoto, H. (2015). *The Use of Digital Analytics for Marketing Performance Measurement*.

Reference Books

- Chaffey, D., & Ellis-Chadwick, F. (2022). *Digital Marketing*. Pearson Education.

Marketing of Services (MS615)

(PEC 3 Credits 2-0-2-0)

Objective

To help students understand how services differ from goods, how service strategies are designed and delivered, and how organizations manage service quality and customer expectations.

Course Outcomes

Students will be able to

Explain service characteristics, apply the extended service marketing mix, design quality-driven service strategies, and analyze sector-specific service marketing practices.

Course Plan

Unit 1: Marketing services; Concept and characteristics of services; Classification of services; Growth of the service sector; Need and relevance of services marketing.

Unit 2: Marketing mix for services; Seven Ps: product, price, promotion, place, people, physical evidence, and process; Distribution methods for services.

Unit 3: Management of service marketing; Managing demand and supply; Capacity planning and segmentation; Internal marketing; Internal versus external service strategies.

Unit 4: Delivering quality service; Service quality process; TQM in services; Six Sigma; Service quality gaps; Customer expectation vs. perceived service gap; Quality standards; Technological and process requirements.

Unit 5: Marketing of services in specific sectors: financial services, health services, hospitality and tourism, professional services, public utilities, and educational services.

Reference Books

- Adrian Payne. *The Essence of Marketing*, Prentice Hall of India, 2001.
- Christopher Lovelock. *Services Marketing*, Pearson Education Asia, 4th Edition, 2001.
- Helen Woodroffe. *Services Marketing*, Macmillan India Ltd., 1997.
- S. M. Jha. *Services Marketing*, Himalaya Publishing House.
- Valarie A. Zeithaml & Mary Bitner. *Services Marketing*, Tata McGraw Hill, 2000.

Retail Management & rTech (MS616)

(PEC 3 Credits 2-0-2-0)

Objective

To help students understand contemporary retailing trends, evaluate retail opportunities, and analyze key tools used in merchandise planning, store management, and retail technology. The course also builds the ability to assess how retail practices adapt to consumer, legal, competitive, and technological environments.

Course Outcomes

Students will be able to

Explain retail concepts and formats, analyze retail location and store design decisions, evaluate consumer buying behaviour, and apply retail technologies and automation tools to improve customer engagement and operational efficiency.

Course Plan

Unit 1: Retailing: definition and importance; Indian vs. global retail scenario; Types of retailing-store and non-store; Retail formats; Franchising in retailing; Retail marketing mix; Retail consumer buying behaviour: types, influencing factors; Segmentation and positioning.

Unit 2: Retail organization structure; Major functional areas; Careers in retailing; Retail location decisions; Factors affecting location and site selection; Steps in selecting a retail site; Location-based retail strategies.

Unit 3: Store design; Interiors and exteriors; Store layout and types of layouts; Factors influencing layout decisions; Retail image mix; Store façade; Retail communication mix.

Unit 4: Role of IT in retailing; Retail technologies; Point of Sale (PoS) systems; Customer engagement technologies; Floor design tools; Merchandising innovations; AR/VR applications in retailing.

Unit 5: Retail automation; Lean retailing technologies; Development and deployment of retail tech solutions for operations, inventory, and customer experience.

Text Books

- Chetan Bajaj. *Retail Management*. Oxford University Press.
- Gibson Vedamani. *Retail Management*. Jaico Publishing House.
- David Gilbert. *Retail Marketing Management*.
- Ron Hasty & James Reardon. *Retail Management*.
- A. J. Lamba. *The Art of Retailing*.
- W. Steward. *Retail Management*.
- David Walters. *Retail Management: Analysis, Planning & Control*.

Data-Driven Marketing (MS617)

(PEC 3 Credits 2-0-2-0)

Objective

To understand the concept of delivery channels, as well as creative content that is appropriate to each, in order to establish and grow relationships that benefit marketer and consumer alike.

Course Outcomes

Students will be able to

- Analyse and interpret customer data to inform strategic marketing decisions.
- Utilize data analytics tools to optimize and measure performance.
- Develop personalized marketing strategies based on consumer insights and behavioural patterns and understand the ethical considerations and best practices.

Data-Driven Models: An Overview

Identifying what to measure, the descriptive, diagnostic, predictive, and prescriptive approach DDM, The classical marketing metrics, the essential financial metrics.

Optimizing Marketing Strategies

Identifying the marketing process, Establishing key customer/consumer touchpoints, Modeling, Model optimization and reinforcement, Developing logic and decision scenarios.

Harnessing Data for Marketing strategy

The modern metrics, Web auditing, SEO&SERP, Social sentiment & click economy, AI & new age marketing communication.

Navigating the Dataset

Leaders & laggards: Barriers to Data-Driven Marketing, UX, CX & Data, Extracting, Exploring, and Understanding the Dataset

Reference Books:

- McDougall, J. S. (2012). #Tweetsmart.
- Semmelroth, D. (2013). Data-driven marketing for dummies.
- Bryan, R. (2017). Data-driven marketing.
- Jeffery, M. (2010). Data-driven marketing: The 15 metrics everyone in marketing should know.
- Sponder, M. (2018). Digital analytics for marketing.
- Holdren, A. (2020). Google AdWords.
- Croll, A. (2018). Lean analytics.
- Busche, L. (2017). Lean branding.
- Chaters, B. (2018). Mastering search analytics.
- Ward, A. A. (2017). SEO battlefield.
- Jerkovic, J. I. (2015). SEO warrior.
- Zarrella, D. (2019). The social media marketing book.

Social Media Marketing (MS618)

(PEC 3 Credits 2-0-2-0)

Objective

This course provides students with foundational and advanced knowledge of social media marketing concepts, tools, and strategies. It prepares students to create engaging content, manage campaigns, analyze performance, and use social media insights for informed marketing decisions.

Course Outcomes

Students will be able to

- Understand key concepts and strategies in social media marketing.
- Evaluate different social media platforms and tools for marketing effectiveness.
- Develop and manage social media campaigns using scheduling and analytics tools.
- Apply data-driven content creation techniques for audience engagement.
- Implement influencer marketing and brand-building strategies.
- Use social listening, sentiment analysis and real-time feedback for decision-making.
- Address ethical, privacy and regulatory issues in social media marketing.

Course Plan

Unit 1: Introduction to Social Media Marketing: Concept, scope and importance; Social media platforms—online communities, forums, blogs, microblogs, social networks and emerging platforms; Goals and role of social media in marketing; Social media as a listening and engagement tool; Trends in social media marketing; Role of social media influencers.

Unit 2: Social media marketing plan and performance measurement: Setting goals, defining strategies, identifying target audiences, selecting tools and platforms; Implementation of social media plans; Measuring effectiveness—conversion rate, amplification rate, applause rate, on-page and on-post analytics.

Unit 3: Content creation and sharing using case campaigns: Blogging, video streaming and podcasting; Content criteria and approaches—70/20/10 rule, 50–50 content balance, brand mnemonic and brand storytelling; Contextualizing content for audiences; Ethics in social media content creation.

Unit 4: Social commerce: Zones, strategies and benefits; Use of social media for consumer insight; Social media listening and monitoring; Sentiment and content analysis; Common errors in social media research.

Text Books

- Chaffey, D., & Ellis-Chadwick, F. (2022). *Digital Marketing* (8th ed.). Pearson Education.
- Barker, M., Barker, D. I., Bormann, N. F., & Neher, K. E. (2022). *Social Media Marketing: A Strategic Approach* (3rd ed.). Cengage Learning.
- Tuten, T. L., & Solomon, M. R. (2023). *Social Media Marketing* (5th ed.). SAGE.

Reference Books

- Kerpen, D. (2019). *Likeable Social Media* (3rd ed.). McGraw-Hill Education.
- McDonald, J. (2023). *Social Media Marketing Workbook: How to Use Social Media for Business*. CreateSpace.
- *The SAGE Handbook of Social Media Marketing* (2023). SAGE Publications.

Course Curriculum

MBA

Elective Baskets

Basket 2 : Financial Management

PCC: Program Core Course, PEC: Program Elective Course, SEC: Skill Enhancement Course HSMC: Humanities, Social Science, and Management Course, ELC: Experiential Learning Course

Security Analysis and Portfolio Management (MS619)

(PEC 3 Credits 2-0-2-0)

Objective

The proposed course framework for “Security Analysis and Portfolio Management” provides students with a guided tour of the so-called ‘complex’ world of investments and seeks to improve student’s skills in managing investments. This course seeks to capture the essence of modern developments in investments. It will make students conversant with every technique to make safe and sound investment.

Course Outcomes

Students will be able to understand

- Characteristics of various investment alternatives
- Indian Stock Market Functioning
- Techniques for analysis and valuation of investment alternatives
- Implication of modern research in the field of investments.
- Framework for portfolio management
- Strategies followed by investment wizards of the world
- Guidelines for investors with varying inclinations

Introduction to Investments

Introduction to Investment; Investment Objectives and Alternatives; Introduction to the Indian Stock Market; Stock Market Indicators (Index); Selection of Investment in the Global Market.

Security Analysis and Valuation

Analysis and Valuation of Debt; Analysis and Valuation of Equity; Security Analysis – Fundamental Analysis; Security Analysis – Technical Analysis.

Market Efficiency and Portfolio Theory

Efficient Market Theory; Portfolio Theory and the Benefits of Diversification; Capital Asset Pricing Model (CAPM) and Arbitrage Pricing Theory (APT).

Portfolio Management Framework

Portfolio Management Framework; Guidelines for Investment Decisions.

Text Books

- Prasanna Chandra, *Investment Analysis and Portfolio Management*, Tata McGraw-Hill Publishing Company.
- Donald E. Fischer & Ronald J. Jordan, *Security Analysis and Portfolio Management*, Prentice-Hall India.

Reference Books

- V. A. Avadhani, *Security Analysis and Portfolio Management* (8th Edition), Himalaya Publishing House.
- Punithavathy Pandian, *Security Analysis and Portfolio Management*, Vikas Publishing House.
- *Securities Markets and Products* (2nd Edition), Indian Institute of Banking and Finance.
- David G. Luenberger, *Investment Science* (2nd Edition), Oxford University Press.

International Financial Management (MS620)

(PEC 3 Credits 2-0-2-0)

Objective

To equip students with the knowledge and skills required to manage international financial transactions in an increasingly globalized business environment. The course aims to develop competencies essential for making informed financial decisions in multinational and cross-border contexts.

Course Outcomes

Students will be able to understand

- Introduction to International Business and MNCs thereon.
- History of International Monetary System
- Balance of Payments analysis showing flow of funds following international financial transactions.
- Foreign exchange market including the market for derivatives
- Exchange Rate determination
- Exchange rate exposure- its assessment and management
- Investment decision of the MNCs
- MNCs working capital management

Introduction to International Finance

Introduction to International Business and MNCs; History of the International Monetary System; International Flow of Funds; Balance of Payments (BOP).

Foreign Exchange Markets and Currency Derivatives

Foreign Exchange Market; Exchange Rate Mechanisms –(PPP) and (IRP); Currency Derivatives – Futures, Options, and Swaps.

Foreign Exchange Exposure and Risk Management

Nature and Measurement of Foreign Exchange Exposure; Management of Foreign Exchange Exposure.

International Financial Decisions

International Capital Budgeting; International Financial Instruments; International Working Capital Management; Contemporary Issues in International Financial Management.

Reference Books

- A. C. Shapiro, *Multinational Financial Management*, Wiley Publications.
- P. G. Apte, *International Financial Management*, Tata McGraw-Hill.
- V. Sharan, *International Financial Management* (4th Edition), Prentice-Hall India.

Strategic Cost Management (MS621)

(PEC 3 Credits 2-0-2-0)

Objective

The primary objective of the course is to acquaint the students with the basics of cost management and utility of effective cost management in the formulating strategic plans for the organization.

Course Outcomes

Students will be able to

- Develop a deep understanding of cost management concepts, including cost behaviour, allocation, and control, and their strategic relevance to business decision-making.
- Apply advanced costing techniques, such as activity-based (ABC), target, and life-cycle costing, to accurately allocate costs and support pricing and profitability decisions.
- Gain insight into how cost management integrates with business strategy, improving competitive positioning through cost leadership, value chain analysis, and cost reduction strategies.
- Acquire the skills to use relevant cost information for managerial decision-making, including make-or-buy decisions, pricing decisions, and product mix optimisation.
- Understand the impact of global competition, outsourcing, and supply chain management on cost structures and apply strategies to optimise costs in a globalised business environment.
- Understand how to identify, assess, and manage financial and operational risks through strategic cost management practices

Introduction to Strategic Cost Management. Conceptual framework, cost behavior and cost structures, environmental influences on cost management practices, and the role of SCM in strategic positioning.

Decision-making in Costing. Decision-making and Pricing strategies; Value Analysis, Value Chain Analysis and Value Engineering, Aligning Cost Management with Organizational Strategy

Budgeting, Performance Management, and Cost Control. Budgetary Control and Standard costing in profit Planning; Relevant Cost Analysis, Standard Costing and Variance Analysis (Material, Labor, Overhead) Tools for Monitoring and Controlling Costs.

Strategic Concepts in Cost Management. Process Control and Activity Based Cost Management, JIT & E; Life Cycle Costing, Identifying and Managing Financial and Operational Risks, Risk Mitigation through Strategic Cost Management

Text Books

- “Strategic Cost Management: The New Tool for Competitive Advantage”, S. Govindarajan, First Edition, 2008, Simon & Schuster Publication, ISBN 978-1439150368.
- “Strategic Cost Management”, Ravi M. Kishore, Fifth Edition, 2024, Taxmann Publications, ISBN 978-9357784719.

- “Managerial Accounting”, R.W. Hilton, D. E. Platt, Eleventh Edition, 2020, McGraw Hill Education (India), ISBN 978-9389957891.

Reference Books

- “Cost Management- A Strategic Emphasis”, E. Blocher, P. Juras, S. Smith, Ninth Edition, 2021, McGraw Hill Education, ISBN 978-1265714550.

Behavioral Finance (MS622)

(PEC 3 Credits 2-0-2-0)

Objective

The primary objective of the course is to make the students familiar with the various behavioural implications in financial decision making and identifying the ways and means to overcome some of the biases prevalent in while making decisions in the financial market.

Course Outcomes

Students will be able to

- Understand various behavioural biases and their impact on financial decision-making.
- To know various irrational things prevalent in the market which have influence on the behaviour of a rational participant in the market

Introduction

Introduction to Behavioural Finance; Rationale for Studying Behavioural Finance; History of Behavioural Finance Studies; Theories of Behavioural Finance; Criticisms of Behavioural Finance; Arguments in Favour of Behavioural Finance.

Foundations of Behavioural Finance

Basic Foundations of Behavioural Finance; Context for Studying Behavioural Finance; Building Blocks of Behavioural Finance – Limits to Arbitrage, Psychology.

Investor Psychology and Investment Decisions

Investors' Psychology and Investment Decisions; Insufficient Diversification; Naive Diversification; Excessive Trading; The Selling Decision; The Buying Decision.

Behavioural Biases and Decision-Making

Prospect Theory; Regret Theory; Mental Accounting; Overconfidence and Overreaction in Financial Markets; Anchoring; Herd Behaviour; Confirmatory Bias.

Text Books

- James Montier, *The Little Book of Behavioural Investing*, John Wiley & Sons.
- Peter Dybdahl Hede, *Behavioural Finance*, Bookboon.com.

Reference Books

- Martin Sewell, *Behavioural Finance*.
- Barberis, Nicholas C., & Thaler, Richard H. (2003). "A Survey of Behavioral Finance." *Handbook of the Economics of Finance*, Vol. 1B, Elsevier North Holland, pp. 1053–1128.
- Fama, Eugene F. (1998). "Market Efficiency, Long-Term Returns, and Behavioral Finance." *Journal of Financial Economics*, 49(3), 283–306.
- Festinger, Leon; Riecken, Henry W.; & Schachter, Stanley (1956). *When Prophecy Fails*. University of Minnesota Press.
- Kahneman, Daniel; Slovic, Paul; & Tversky, Amos (1982). *Judgment Under Uncertainty: Heuristics and Biases*. Cambridge University Press.
- Kahneman, Daniel & Tversky, Amos (1979). "Prospect Theory: An Analysis of Decision Under Risk." *Econometrica*, 47(2), 263–292.

Management of Banking and Financial Institutions (MS623)

(PEC 3 Credits 2-0-2-0)

Objective

The objective of this course is to enable the students in understanding the strategic operational policies and practices of bank management. The course will help in understanding the organizational structure of banks, and how banking and other financially related legislation and regulation have impacted the operation of today's financial companies. The student will be able to distinguish the utility of various non-banking institutions like insurance, housing finance and credit rating

Course Outcomes

Students will be able to

- Identify the role of banking in the economic development of a country.
- Analyse the financial health and risk profile of a bank through its balance sheet.
- Evaluate key credit management parameters used by banks.
- Understand the concept, causes, and implications of Non-Performing Assets (NPAs).
- Explain the operating procedures of banks and financial institutions in accordance with regulatory rules and guidelines.

Introduction to Banking and Capital Adequacy

Scheduled and Non-Scheduled Banks; Capital Adequacy in Banks; Functions of Capital Funds in Commercial Banks; Capital Adequacy Norms; Basel Norms on Capital Adequacy; Credit Management; Asset–Liability Management (ALM); Non-Performing Assets (NPAs).

Merchant Banking and Related Services

Merchant Banking – Issue Management; SEBI Guidelines; Institutional and Operational Framework; Regulation of Merchant Banking Activities; Obligations of Merchant Bankers; Factoring; Forfaiting.

Financial Institutions and Specialized Services

Non-Banking Financial Companies (NBFCs); Housing Finance; Loan Consortium; Domestic and External Investment Banking; Insurance Organizations; Credit Rating.

Financial Regulators and Investment Vehicles

SEBI; RBI; IRDA; Mutual Funds – Types and Advantages; Exchange-Traded Funds (ETFs); Hedge Funds; Regulations on Mutual Funds.

Text Books

- M. Y. Khan, *Indian Financial System*, Tata McGraw-Hill.
- Saunders & Cornett, *Financial Institutions Management: A Risk Management Approach*, Tata McGraw-Hill.

Reference Books

- Gerald Hatler, *Bank Investments and Funds Management*, Macmillan.

Financial Technology (MS624)

(PEC 3 Credits 2-0-2-0)

Objective

Fintech is one of the most discussed areas within the finance industry, with high expectations of its contribution to industry productivity, profitability, and benefit for society. This course will be especially useful for techno-managers aiming for management positions in finance, for which the grasp of fundamental fintech concepts and economic tradeoffs would be helpful. This course provides a nontechnical, in-depth treatment of recent fintech developments for those aiming to work in finance. The course will discuss important issues in blockchain and cryptocurrencies; crowdfunding and P2P lending; and high-frequency trading.

Course Outcomes

Students will be able to

- Understand the global FinTech landscape and the role of banks and financial service providers in driving and responding to innovation and disruption.
- Appraise how emerging technologies are transforming the financial services industry.
- Gain familiarity with the competitive landscape of FinTech startups across payments, lending, banking, capital markets, and insurance.

FinTech Foundations and BFSI Transformation

BFSI Value Chain; How FinTech Changed BFSI; Introduction to the FinTech Landscape; FinTech Architecture; FinTech Technologies; Latest Trends and Future of FinTech; FinTech Startups.

Blockchain and Cryptocurrencies

Blockchain Foundations; Blockchain in Use; Smart Contracts; Cryptocurrencies Primer; Bitcoin and Applications; Cryptocurrencies and Digital Crypto Wallets; Types of Cryptocurrencies; Cryptocurrencies and Applications.

Digital Payments and Lending Innovations

Global Payment Ecosystem; Payments Architecture and Setup; Innovation in Consumer and Retail Payments; Popular Payments Technology; Concept of P2P Lending; P2P and Marketplace Lending.

Emerging FinTech Solutions and Technologies

Innovative Products in Mobile-Based Systems; Credit Cards; POS-Based Ecosystem; BankTech; InsurTech; RegTech; Algorithmic Trading; Robo-Advisory.

Text Books

- Agustin Rubini, *Fintech in a Flash: Financial Technology Made Easy*, Zaccheus, 3rd Edition, 2018.
- Susanne Chishti & Janos Barberis, *The FINTECH Book: The Financial Technology Handbook for Investors, Entrepreneurs and Visionaries*, John Wiley, 1st Edition, 2016.

Reference Books

- Theo Lynn, John G. Mooney, Pierangelo Rosati & Mark Cummins, *Disrupting Finance: FinTech and Strategy in the 21st Century*, Palgrave, 1st Edition, 2018.

Financial derivatives and Risk Management (MS625)

(PEC 3 Credits 2-0-2-0)

Objective

This course develops understanding of complex financial instruments. The main aim of this course is to familiarize students with the concepts of financial derivatives. In today's world of rapid information flows, rising volatility, regulatory concerns and oversight, prudent management increasingly requires understanding and measuring risk. This course also aims to introduce students to the rationale, principles, process and major tools of risk management.

Course Outcomes

Students will be able to

- Understand how derivatives are used to address problems in finance and investment.
- Evaluate risks in terms of frequency and severity using various statistical and financial tools and mitigate using appropriate risk management techniques.

Introduction to Derivative Instruments

Introduction to Derivative Instruments – Futures and Forwards; Commodity Futures; Swaps; Options.

Derivative Mechanics and Pricing

Derivative Mechanics and Strategies; Greeks; Option Pricing – Binomial Model; Black–Scholes–Merton Model.

Risk Identification and Measurement

Types of Risk – Credit Risk, Market Risk, Operational Risk, Liquidity Risk, Legal Risk, Interest Rate Risk, Currency Risk; Risk Measurement; Risk Preferences; Risk Premium; Risk Attitudes.

Risk Management Tools and Techniques

Value at Risk (VaR); Stress Testing and Scenario Analysis; Risk Transfer; Risk Management Methods in Business.

Text Books

- John C. Hull & Sankarshan Basu, *Options, Futures and Other Derivatives*.
- John C. Hull, *Fundamentals of Futures and Options Markets*.

Reference Books

- Robert Kosowski & Salih N. Neftci, *Principles of Financial Engineering*.

Project Appraisal and Financing (MS626)

(PEC 3 Credits 2-0-2-0)

Objective

Project Finance differs quantitatively and qualitatively in many ways as compared to the traditional corporate finance. This course will provide an exposure to this innovative financing method - Project Finance, and its applicability and utility across industries.

Course Outcomes

Students will be able to

- Gain exposure to risk assessment and risk management techniques used in infrastructure projects.
- Understand the complexities involved in accurately constructing and evaluating project cash flows.
- Learn the principles of financing and valuation of infrastructure projects.
- Develop familiarity with the legal, regulatory, and industry frameworks governing infrastructure development.

Fundamentals of Project Finance and Risk Evaluation

Basics of Project Finance; Risk Evaluation in Projects: Analysis of various project risks such as completion, market, price, promoter interest rate, exchange, technology, operating, availability of inputs, regulations, environmental and social and infrastructure and their mitigation.

Project Costing and Financing Instruments

Estimating Cost of Project; Computation of Margin Money for Working Capital; Analysis of Equity, Debt, Mezzanine, and Other Structured Financial Instruments; Private Equity.

Project Contracts and Investment Evaluation

Leasing; Study of Project Contracts; Investment Evaluation Techniques – Payback Period, Return on Capital Employed, Internal Rate of Return (IRR), Net Present Value (NPV), Sensitivity Analysis.

Technical, Legal, and Analytical Aspects of Projects

Technical Aspects in Projects; Valuation and Financial Ratio Analysis; Legal and Insurance Considerations; Role of Consultants.

Text Books

- John C. Hull, *Risk Management and Financial Institutions*.

Reference Books

- Michel Crouhy, Dan Galai & Robert Mark, *The Essentials of Risk Management*.

Course Curriculum

MBA

Elective Baskets

Basket 3 : Operations Management

PCC: Program Core Course, PEC: Program Elective Course, SEC: Skill Enhancement Course
HSMC: Humanities, Social Science, and Management Course, ELC: Experiential Learning Course

Supply Chain Management (MS627)

(PEC 3 Credits 2-0-2-0)

Objective

This course enables to discuss key concepts and issues in the design, operations and management of supply chains

Course Outcomes

Students will be able to

- To understand the end-to-end operations of supply chains including global issues.
- To learn and apply various mathematical techniques for solving issues such as forecasting, aggregate demand, inventory management etc.

Unit – I Strategic Framework

Introduction: Basic Concept & Philosophy of Supply Chain Management; Essential features, Various flows (cash, value and information), Key Issues in SCM, benefits and case examples. Supply chain as a competitive advantage, Global Supply chain strategy, Structuring supply chain capabilities, Business matching supply chain design with business strategy. Supply Chain Drivers and Metrics

Unit – II Designing supply chain network

Designing supply chain network: Designing distribution networks and application to online sales, Network Design in supply chain, Designing Global supply chain networks

Unit – III Planning and coordinating demand and supply

Planning and coordinating demand and supply: Forecasting, Aggregate planning, sales and operations planning, coordination in Supply Chain

Unit – IV Planning and Managing Inventories and Transportation

Inventory Management: Concept, various costs associated with inventory, System of Inventory management. Managing Economies of scales, Managing uncertainty, Product availability, Managerial levers of profitability, Transportation in a Supply Chain

Unit – V Emerging Issues in SCM

Role of Computer / IT in Supply Chain Management, CRM Vs SCM, Benchmarking-concept, Features and Implementation, Sustainable supply chain

Text books

- Sunil Chopra and Peter Meindi, Supply Chain Management-Strategy Planning and Operation, Pearson Education.
- Joel D. Wisner, Principles of Supply chain management, Cengage Learning, 2007 45
- Simchi-Levi, Designing and Managing the Supply Chain, TMH, India.

References Books

- Monczka et al., Purchasing and Supply Chain Management, Cengage Learning, Second edition, Second Reprint, 2002.
- Altekhar Rahul V, Supply Chain Management-Concept and Cases, Prentice Hall India, 2005.
- Shapiro Jeremy F, Modeling the Supply Chain, Cengage Learning, Second Reprint , 2002.
- Ballou Ronald H, Business Logistics and Supply Chain Management, Pearson Education, Second Indian Reprint, 2004.
- Raghuram G. (I.I.M.A.) - Logistics and Supply Chain Management (Macmillan, 1st Ed.)
- Agarwal D.K. - A Text Book of Logistics and Supply chain management (Macmillan, 1st Ed.).

Strategic Sourcing and Logistics Management (MS628)

(PEC 3 Credits 2-0-2-0)

Objective

The purpose of this course is to provide an understanding of the issues in Sourcing and logistics in industry. This course describes and offers insights on the transformation from functional sourcing or purchasing to strategic sourcing.

Course Outcomes

Students will be able to understand

- Insights about critical aspects in sourcing, outsourcing, contracting, e-sourcing etc. to know the logistical management and operations
 - Dramatic change of purchasing into world class supply management
 - Various strategic decisions for outsourcing, supplier selection, evaluation and development.
 - The role of communications, electronic exchanges, global markets and Internet in sourcing process design
1. **Strategic supply management** - Imperatives, evolution of strategic procurement; Supply chains and networks; Supply management's role in business and its impact on bottom line; Strategic supply management alliances.
Total Cost of Ownership (TCO) and strategic cost management, Components of TCO; Price and cost analysis; Discounts and contract compensation arrangements.
 2. **Outsourcing and managing suppliers** - Make or buy decisions; Strategic issues in outsourcing; Supplier selection (bidding and negotiation); Supplier evaluation and development; Single sourcing versus multiple sourcing; Supply base reduction.
 3. **Supplier relationship management and Global supply management** - Supplier relationship and contract management, incentives, innovation and supply risks; Supply channels and global trade Intermediaries; Currency and payment issues.

E-Procurement systems – benefits, barriers, measuring benefits, reverse auction, e-auction, e-commerce
 4. **Logistics Management** - Logistics concept, role and scope; CRM, Procurement, manufacturing. Logistics Environment- Integrating Logistics of Supply, Logistics of Production and Logistics of Distribution. Integrated Operations Planning.
 5. **Logistics Operations** - Internal and external factors for logistics strategy, Operational Resources of logistics (personnel, warehouse means of transport, warehouse transport aids, organizational aids, material stocks, and area/spare)

Text books:

- Joel D. Wisner, Principles of Supply chain management, Cengage Learning, 2007 45

- Peter Baily, David Farmer, Barry Crocker, David Jessop, David Jones. Procurement Principles and Management (Pearson 11e)
- Monczka et al., Purchasing and Supply Chain Management, Cengage Learning, Second edition, Second Reprint, 2002.

Reference Books

- Sunil Chopra and Peter Meindi, Supply Chain Management-Strategy Planning and Operation, Pearson Education, Third Indian Reprint, 2004.
- Altekhar Rahul V, Supply Chain Management-Concept and Cases, Prentice Hall India, 2005.
- Shapiro Jeremy F, Modeling the Supply Chain, Cengage Learning, Second Reprint , 2002.
- Ballou Ronald H, Business Logistics and Supply Chain Management, Pearson Education, Second Indian Reprint, 2004.
- Donald J. Bowersox, David J. Closs, M. Bixby Cooper, John C. Bowersox. Supply Chain Logistics Management (McGraw Hill Education 4e)
- Raghuram G. (I.I.M.A.) - Logistics and Supply Chain Management (Macmillan, 1st Ed.)

Project Management (MS629)

(PEC 3 Credits 2-0-2-0)

Objective

This course focuses on project management methodology that will allow you to initiate and manage projects efficiently and effectively. This course develops the competencies and skills for planning and controlling projects and understanding interpersonal issues that drive successful project outcomes. It examines the project management life cycle, defining project parameters, matrix management challenges, effective project management tools and techniques, and the role of a project manager.

Course Outcomes

Students will be able to

- Understand project management design, development, and deployment
- Use project management tools, techniques, and skills
- Utilizing critical resources for effective project implementation
- Understand the implications, challenges, and opportunities of organizational dynamics in project management
- Identify and use key performance metrics for project success
- Understand how to manage project cost, quality, and delivery

1. Overview of Project Management

Basics of Project Management: Concept of Project, Attributes of a Project, Importance of Project Management, Project Management Process, Project Lifecycle, Project Stakeholders, Project Management Structures, Choosing Appropriate Project Management Structure, Implications of Organizational Culture, Main Causes of Project Failure.

Project Definition: Defining Scope, Establishing Priorities, Creating the Work Breakdown Structure (WBS), integrating the WBS with the organization, Coding the WBS for information system, Project Roll Up, Process Breakdown Structure, Responsibility Matrices.

2. Project Planning

Estimating Project Times and Costs: Factors Influencing Quality of Estimates, Estimation Guidelines for Time, Costs and resources, Macro versus Micro Estimating, Methods for Estimating Project Times and Costs, Level of detail, Developing Budgets, Types of Costs, Refining estimates and contingency funds.

Developing a Project Plan: Developing the Project Network, From Work Package to Network, Constructing a Project Network, Activity-on-Arrow Fundamentals, Network Computation process, Using the Forward and Backward pass information, Level of Detail for activities, Extended Network techniques.

3. Project Scheduling & Risk Management

Scheduling Resources and Reducing Project Duration: Types of Project Constraints, Classification of Scheduling Problem, Resource Allocation Methods, Splitting, Multitasking, Benefits of scheduling resources, Assigning Project work, Multi Project resource Schedules, Rationale for reducing project duration, Options for accelerating Project Completion, Concept and construction of a Project Cost – Duration Graph, Practical considerations.

Managing Risk: Risk Management process – Risk Identification, Risk Assessment, Risk Response Development, Contingency Planning, Risk Response Control, Change Control Management.

4. Project Organization:

The Project Manager: Role and Responsibilities of the Project Manager, Planning, Organizing, Controlling, Skills of the Project Manager – Leadership Abilities, Coaching & mentoring Abilities, Communication Skills, Interpersonal Skills, Ability to Handle Stress, Problem-Solving Skills, Time Management Skills, Delegation, Management of Change.

Managing Project Teams: The five-stage team development model, situational factors affecting team development, team effectiveness, conflict in projects, sources of conflict, and handling conflict. Managing Virtual Project teams, Project team pitfalls.

5. Project Evaluation

Progress and Performance Management and Evaluation: Structure of a Project Monitoring Information System, Project Control Process, Monitoring Time Performance, Need for an Integrated Information System, Developing a status report and index to monitor progress, Forecasting final project cost, Other control issues.

Project Audit and Closure: Project Audit, Project Audit Process, Project Closure, Team, Team member and Project Manager Evaluations.

Text Books

- Project Management Institute (PMI) Guide for Project management
- Jeffrey K. Pinto, Project Management -Achieving Competitive Advantage (Fifth Edition);.Pearson Publication.

Reference Books

- Harvey Maylor, Project Management (Third Edition);. Pitman, London, 1999.
- P. Gopalakrishnan and V. E. Ramamoorthy, Textbook of Project Management (Reprinted Edition); Macmillan India, New Delhi.
- Harold Kerzner, Project Management - A Systems Approach to Planning, Scheduling and Controlling; CBS Publishers, New Delhi.
- W. Alan Randolph and Barry Z. Posner, Effective Project Planning and Management; Prentice-Hall of India, New Delhi, 1988.
- Vasant Desai, Project Management, Himalaya Publishing House
- K. Nagarajan, Project Management (Seventh Edition), New Age International Publishers

- Goyal BB – Project Management : A Development Perspective (Deep & Deep)
- Chaudhary, S – Project Management (Tata McGraw Hill)
- Young TL – The Hand Book of Project Management (Kogan Page)
- Chandra Prasanna - Project : Preparation ,Appraisal, Budgeting and Implementation, (TMH, 5th Ed.)

Advanced Operations Research (MS630)

(PEC 3 Credits 2-0-2-0)

Objective

It aims to make better decisions in complex scenarios by the application of a set of advanced analytical methods. It couples theories, results and theorems of mathematics, statistics and probability with its own theories and algorithms for problem solving.

Course Outcomes

Students will be able to understand

- To develop models for complex problems in business situations
- To learn various algorithms for solving operations problems
- To effectively develop operational strategies that will suit the organizational need

Unit - I

The Theory of the Simplex Method, Foundations of the Simplex Method, The Simplex Method in Matrix Form, The Revised Simplex Method.

Unit - II

Duality Theory and Sensitivity Analysis, The Essence of Duality Theory, Economic Interpretation of Duality, Primal–Dual Relationships, Adapting to Other Primal Forms, The Role of Duality Theory in Sensitivity Analysis, The Essence of Sensitivity Analysis, Applying Sensitivity Analysis, Performing Sensitivity Analysis on a Spreadsheet, The Dual Simplex Method, Parametric Linear Programming, The Upper Bound Technique, An Interior-Point Algorithm.

Unit - III

Network Optimization Models, The Terminology of Networks, The Shortest-Path Problem, The Minimum Spanning Tree Problem, The Maximum Flow Problem, The Minimum Cost Flow Problem, The Network Simplex Method, A Network Model for Optimizing a Project's Time-Cost Trade-Off.

Unit – IV

Goal Programming-Formulations, Integer Programming-Formulations, Solving Zero-One Problems, Branch and Bond Algorithm for Integer Programming, Cutting Plane Algorithm, All Integer Primal Algorithm, All Integer Dual Algorithm.

Unit - V

Dynamic Programming, Characteristics of Dynamic Programming Problems, Deterministic Dynamic Programming, Probabilistic Dynamic Programming, Traveling Salesman Problem (TSP), Branch and Bound Algorithms for TSP, Heuristics for TSP, Chinese Postman Problem, Vehicle Routing Problem, Critical Path Method, Quadratic Programming.

Text books:

- Hamdy A. Taha – Operations Research – An Introduction (Prentice-Hall, 10th edition)
- Hiller and Lieberman. Introduction to Operations Research. McGraw Hill.

Reference Books

- Wayne Winston. Operations Research: Thomson Books, 2004.
- Sharma J K – Operations Research (Pearson, 3rd Edition)
- Srinivasan, Operations Research, PHI.
- Paneerselvam, Operations Research, PHI

Total Quality Management and Six Sigma (MS631)

(PEC 3 Credits 2-0-2-0)

Objective

It aims to make better decisions in complex scenarios by the application of a set of Total Quality Management and Six Sigma. It couples theories, results and theorems of mathematics, statistics and probability with its own theories and algorithms for problem solving.

Course Outcomes

The students shall be able to

- Understand the Total Quality Management concept and principles
- Understand various tools available to achieve Total Quality Management
- Understand the statistical approach to quality control
- Create awareness about the ISO and QS certification process and its need for the industries
- Develop models for complex problems in business situations
- Learn various algorithms for solving operations problems

Introduction

Definition of Quality, Dimensions of Quality, Quality Planning, Quality costs – Analysis Techniques for Quality Costs, Basic concepts of Total Quality Management, Historical Review, Principles of TQM, Leadership – Concepts, Role of Senior Management, Quality Council, Quality Statements, Strategic Planning, Deming Philosophy, Barriers to TQM Implementation.

TQM Principles

Customer satisfaction – Customer Perception of Quality, Customer Complaints, Service Quality, Customer Retention, Employee Involvement – Motivation, Empowerment, Teams, Recognition and Reward, Performance Appraisal, Benefits, Continuous Process improvement – Juran Trilogy, PDCA Cycle, 5S, Kaizen, Supplier Partnership – Partnering, sourcing, Supplier Selection, Supplier Rating, Relationship Development, Performance Measures – Basic Concepts, Strategy, Performance Measure.

Quality Improvement Techniques

Pareto Diagrams, Cause-Effect Diagrams, Scatter Diagrams, Run Charts, Cause and Effect Diagrams

Statistical Process Control (SPC)

What is Statistical Quality Control? Sources of Variation, Descriptive Statistics, Statistical Process Control Method, Control Chart for Variables, Control Chart for Attributes, C Charts, Process Capability, Developing OC Curve, Average Outgoing Quality

TQM Tools

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

Quality Systems

Need for ISO 9000 and Other Quality Systems, ISO 9000:2000 Quality System – Elements, Implementation of Quality System, Documentation, Quality Auditing, T S16949, ISO 14000 – Concept, Requirements and Benefits.

Six Sigma

Six Sigma definition, goal of Six Sigma, Six Sigma level vs. number of defective units, Evaluation of Six Sigma, Six Sigma methodology –DMAIC & IDOV, Important Concepts of Six Sigma

Text Books

- Dale H. Besterfield, et al., “Total Quality Management”, Pearson Education, Inc. 2003. (Indian reprint 2004). ISBN 81-297-0260-6.
- James R. Evans & William M. Lindsay, “The Management and Control of Quality”, (5th Edition), South-Western (Thomson Learning), 2002 (ISBN 0-324-06680-5).

Reference Books

- Feigenbaum, A.V. “Total Quality Management”, McGraw-Hill, 1991.
- Total Quality Management by N.V.R. Naidu, G. Rajendra New Age international, First Edition, Jan 2006
- Total Quality Management by R.S. Naagarazan, New Age international, 3e, 2015
- Quality Control & Application by B. L. Hanson & P. M. Ghare, Prentice Hall of India, 2004.
- Total Quality Management by V.S. Bagad Technical Publications, First Edition, Jan 2008
- Total Quality Management by S. Rajaram Dreamtech Press, First Edition, Jan 2008

Knowledge Management (MS632)

(PEC 3 Credits 2-0-2-0)

Objective

- To familiarize the participants with basic concepts of data, information & knowledge
- To highlight importance of knowledge management in complex environments.
- To provide an overview of systems, technologies & infrastructure required for knowledge management.

Course Outcomes

- To familiarize the participants with basic concepts of data, information & knowledge
- To highlight importance of knowledge management in complex environments.
- To provide an overview of systems, technologies & infrastructure required for knowledge management.

Unit - I

Introduction to Knowledge Management - Knowledge Society - Types of Knowledge - An Introduction to life in organizations - Concept and Characteristics of KBOs - Dimensions of HRM in KBOs - New Role and Challenges for HRM in the KBOs.

Unit - II

Managing Knowledge for organizational effectiveness - Process and Methods- Concept of Intellectual Capital and Learning Orientation in the Organizations - Knowledge and Role related issues - Performance Appraisal in a KBO - Intellectual Property Rights (IPR).

Unit - III

Managing Knowledge and Personnel & Organizational Health - Rewarding Knowledge - Management of Retention. ICTs in KBOs - HRIS for KBOs - Concept, Mechanisms, and Software Orientation - Performance Management – Mechanisms

Unit - IV

Technologies to Manage Knowledge – Artificial Intelligence – Digital Libraries – Repositories – Knowledge Discovery – Creating Systems that Utilize Knowledge - Knowledge Process Outsourcing - Innovation Clusters

Text Books

- Irma Becerra-Fernandez, Avelino Gonzalez, Rajiv Sabherwal (2004). Knowledge Management Challenges, Solutions, and Technologies . Prentice Hall. ISBN: 0-13-109931-0.

Reference Books

- Elias M. Awad, Hassan M. Ghaziri (2004). Knowledge Management. Prentice Hall. ISBN: 0-13-034820-1.

- Donald Hislop, Knowledge Management in Organizations, Oxford 2nd Edition.
- Ian Watson (2002). Applying Knowledge Management: Techniques for Building Corporate Memories. Morgan Kaufmann. ISBN: 1558607609.
- Madanmohan Rao (2004). Knowledge Management Tools and Techniques: Practitioners and Experts Evaluate KM Solutions. Butterworth-Heinemann. ISBN: 0750678186.
- Stuart Barnes (Ed.) (2002). Knowledge Management Systems Theory and Practice. Cengage Learning.
- Kimiz Dalkir, Knowledge Management in Theory and Practice, Elsevier, Butterworth-Hinemann.
- Shelda Debowski, Knowledge Management, Wiley India Edition.
- Frances Horibe, MANAGING KNOWLEDGE WORKERS, John Wiley & Sons
- Fernandez & Leidner, KNOWLEDGE MANAGEMENT, PHI Learning, New Delhi, 2008
- Ganesh Natarajan and Sandhya Shekhar, KNOWLEDGE MANAGEMENT - ENABLING BUSINESS GROWTH, Tata McGrawHill, New Delhi
- Mruthyunjaya, KNOWLEDGE MANAGEMENT, PHI Learning, New Delhi, 2011

Sustainable and Global Supply Chain (MS633)

(PEC 3 Credits 2-0-2-0)

Objective

It aims to make better decisions in complex scenarios by the application of a set of sustainable and global supply chain. It couples theories, results and theorems of mathematics, statistics and probability with its own theories and algorithms for problem solving.

Course Outcomes

The students will be able

- To understand theories and models for problems in global business situations
- To learn various algorithms for solving Sustainable operations problems

Unit - I

Understanding the complex nature of sustainability, Sustainability and future trends, Industry 4.0 And innovations aiding supply chain sustainability, Sustainable sourcing, Sustainable stages of the supply chain management, Sustainable operations and supply chain management as competitiveness factors, Measuring environmental impacts in supply chains

Unit - II

Reverse logistics and closed-loop supply chain, Business models and strategy in sustainable supply chains and stakeholders, Business implications of sustainability practices in supply chains, The social dimension of sustainable supply chains, Operational aspects of efficiency in sustainable supply chain

Unit - III

Introduction to Global Supply Chain Networks, Zara- fast fashion, The Supply Chain Eco-System Framework, Supply Chain Eco-System Framework: Supply Chains & Resources, Supply Chain Eco-System Framework: Delivery services & Institutions, Performance Analysis, Supply Chain Risk Metro Cash and Carry, Mattel Toy Recalls and Supply Chain Management, Innovation in Emerging markets, Innovations in Supply Chain Ecosystem

Unit - IV

Governance of networked organizations, The Orchestration Governance Model, Orchestration-Examples, Li & Fung, Supply Chain Design, Supply Chain Design, Applications of the Ecosystem, Green supply chain design, Green Supply Chain Ecosystem Analysis, GRIP Framework, Location Selection, Ecosystem Aware Location Analysis, Food supply chain in India, Food supply chain ecosystem - Grip frame work, Food Security in India, Smart Villages and Cities

Text Books:

- N.Viswanadham and S.Kameshwaran, Ecosystem Aware Global Supply Chain Management, World Scientific Publishing, 2013
- Dmitry Ivanov, Alexander Tsipoulanidis, Jörn Schönberger, Global Supply Chain and Operations Management - A Decision-Oriented Introduction to the Creation of Value, Second Edition, Springer Texts in Business and Economics, ISBN 978-3-319-94312-1, ISBN 978-3-319-94313-8 (eBook)
- Yann Bouchery, Charles J. Corbett, Jan C. Fransoo, Tarkan Tan, Sustainable Supply Chains - A Research-Based Textbook on Operations and Strategy

Harvard Cases:

- Metro Cash & Carry, Tarun Khanna, Krishna Palepu, Carin-Isabel knoop, David Lane, Case: 9-707-505, May 2007
- Cemex: Transforming a Basic Industry Company, Case: GS-33 , David Hoyt and Hau Lee, July 2005
- Unsafe for children: Mattel's toy recalls and Supply chain management Case: GS-63
- Zara fast fashion, Pankaj Ghemavat, Jose Luis Nueno, 5-703-497, Dec 2006
- Li & Fung 2006, F.Warren Mcfarlan, William C Kirby, Tracy Yuen Manty 9-307-077

Service Operations Management (MS634)

(PEC 3 Credits 2-0-2-0)

Objective

It aims to make better decisions in complex scenarios by the application of a set of Service Operations Management. It couples theories, results and theorems of mathematics, statistics and probability with its own theories and algorithms for problem solving.

Course Outcomes

The students shall be able

- To effectively define and develop operational strategies for service industries.
- To learn various algorithms for solving operations problems

Unit - I

Introduction; Nature & Role of Services in Economy; Service Operations and their Management Fundamentals; Service Strategy; Positioning of Services in the Organisation Value Chain, Service Facility Design, Layout & Location, Off-shoring & Outsourcing; Technology in Services, Front-office Back-office Interface; Human Factor in Services; External Associates in Service Processes

Unit - II

Service Encounter Design and Control; Managing Service Processes; Experience Management in Service Operations; Service Quality and Reliability Assurance; Service Process Improvement & the Associated Methodologies; Experience Innovation Paradigm; New Service Development

Unit - III

Service Growth and Globalization; Forecasting Demand for Services; Capacity and Demand Management; Customer Expectations and the Planned Provision in Service Delivery; Legal Aspects of Expectation-Delivery Gaps; Service Waiting Line and Customer Relationship Management; Inventory Management for Improved service Delivery

Unit - IV

Introduction to AI and other new age technologies. AI as a service (AIaaS). Futuristic Scenario of incorporating new technologies like cloud computing, simulation, robotics etc in service operations

Text Books:

- James A. Fitzsimmons, Mona J. Fitzsimmons, Service Management – Operations, Strategy, Information Technology, Tata McGraw – Hill Edition 2006.
- Richard Metters, Kathryn King-Metters, Madeleine Pullman, Steve Walton Service Operations Management, South-Western, Cengage Learning, 2006.

Reference Books:

- Cengiz Haksever, Barry Render, Roberta S. Russell, Robert G. Murdick, Service Management and Operations, Pearson Education – Second Edition.
- Robert Johnston, Graham Clark, Service Operations Management, Pearson Education, 2005
- Haksever, et al. (2006), Service Management and Operations, Pearson Education
- Hollins (2007), Managing Service Operations, Sage Publications
- Davis & Heineke (2003), Managing Services: People and Technology, Tata McGraw Hill.

Course Curriculum

MBA

Elective Baskets

Basket 4 : Human Resource Management

PCC: Program Core Course, PEC: Program Elective Course, SEC: Skill Enhancement Course HSMC: Humanities, Social Science, and Management Course, ELC: Experiential Learning Course

Business Transformation and VUCA (MS635)

(PEC 3 Credits 2-0-2-0)

Objective

To familiarize students with the principles and paradigms of business transformation in the context of the VUCA environment (Volatility, Uncertainty, Complexity, Ambiguity) and equip them with the frameworks, strategies, and digital tools required to lead organizational transformation in dynamic and disruptive business landscapes.

Course Outcomes

Students will be able to:

- Analyze how VUCA conditions influence organizational strategies, structures, and transformation initiatives.
- Evaluate business transformation frameworks and apply them to real-world cases.
- Design adaptive, technology-enabled transformation strategies suitable for volatile and uncertain environments.
- Lead and manage change initiatives using structured tools, models, and communication approaches.
- Assess the role of leadership, culture, and innovation in enabling successful business transformation.

Introduction to Business Transformation & VUCA

- Meaning, scope, and evolution of business transformation.
- Foundations of VUCA: Definitions, origins, implications for global business.
- Transition from stable markets to disruptive environments.
- VUCA as a strategic lens for organizational decision-making.

Understanding VUCA and Its Impact on Business Strategy

- VUCA explained: Global, Asian, and Indian business perspectives.
- Impact of volatility, uncertainty, complexity, and ambiguity on business models.
- Strategic agility, resilience, and enterprise adaptability.
- Caselets from Indian corporates and global firms.

Digital Transformation in a VUCA World

- Digitalization drivers: Industry 4.0, cloud, AI, automation, analytics.
- Business process redesign and digital-first operating models.
- Data-driven decision-making & digital strategy formulation.
- Cybersecurity, data privacy, and ethical considerations in digital transformation.

Organizational Practices for Navigating VUCA

- Agile methodologies in business functions.
- Business model innovation: Blue Ocean, Lean Startup, Design Thinking.
- Workforce trends: Gig economy, hybrid work, global talent networks.
- Building learning organizations and continuous capability development.

Change Management & Culture in Transformation

- Major change management models: Kotter, ADKAR, Lewin.
- Leading transformation: Sensemaking in uncertainty.
- Organizational culture and its alignment with transformation goals.
- Managing employee experience during disruption and change.

Leadership, Resilience & the Future (VUCA → BANI World)

- Leadership competencies for business transformation.
- Scenario planning, crisis management, and organizational resilience.
- BANI (Brittle, Anxious, Non-linear, Incomprehensible) as the next paradigm.
- Global perspectives: Comparative strategies across economies.

Text Books

- Ulrich, D., Brockbank, W., Johnson, D., Sandholtz, K., & Younger, J. (2008). *HR Competencies: Mastery at the Intersection of People and Business*. Society for Human Resource Management.
- Kraaijenbrink, J. (2018). *The VUCA Toolkit: Redesigning HR and Leaders for a Changing World*. Independently published.

Reference Books

- Lawler, E., & Boudreau, J. (2015). *Global Trends in Human Resource Management: A Twenty-Year Analysis*. Stanford University Press.
- Bersin, J. (2019). *HR Technology Market 2019: Disruption Ahead*. Bersin Academy.
- Yeung, A.K., Ulrich, D., & Losey, M.R. (Eds.). (2005). *The Future of Human Resource Management*. Wiley.

Talent and Competency Management (MS636)

(PEC 3 Credits 2-0-2-0)

Objective

To provide students with a comprehensive understanding of how organizations attract, develop, assess, and retain talent through structured competency frameworks, enabling them to design and implement effective talent-management strategies that support organizational performance and employee development.

Course Outcomes

Students will be able to

- Explain the concepts of talent management and competency mapping and describe their relevance in building a competitive workforce.
- Identify and analyse organisational talent needs using tools such as job analysis, competency models, and talent-gap assessments.
- Apply competency frameworks to real organizational scenarios, including hiring, training, appraisal, and career development.
- Evaluate talent-management practices such as succession planning, high-potential (HiPo) programs, performance management, and leadership development.
- Design a basic competency model or talent-management intervention for a specific job role or organizational context.

Unit 1: Foundations of Talent and Competency Management

- Meaning, scope, and importance of talent management
- Concept of competencies: types, characteristics, and relevance
- Strategic role of talent and competency management in organizations
- Relationship with organizational performance

Unit 2: Competency Mapping and Workforce Planning

- Job analysis: job description & job specification
- Steps in competency mapping
- Methods of competency identification
- Workforce planning and talent-gap analysis
- Linking competency models with business strategy

Unit 3: Talent Acquisition and Development

- Competency-based recruitment and selection
- Assessment centres, testing, and interviewing based on competencies
- Learning and development aligned with competency models
- Developing leadership competencies
- High-potential (HiPo) programs

Unit 4: Competency-Based Performance Management and Career Systems

- Competency-based appraisal systems
- Competencies in performance evaluation tools
- Designing competency-based career paths and progression systems
- Succession planning using competency frameworks
- Rewards and recognition aligned to competencies

Unit 5: Talent Retention and Employee Engagement

- Importance of talent retention for organizational stability
- Drivers of retention: work environment, leadership, culture
- Employee engagement strategies
- Competency development as a tool for retention
- Designing retention programs and employee value propositions (EVP)

Unit 6: Emerging Trends and Future Directions

- Digital transformation and AI applications in talent & competency management
- Global talent mobility and challenges in the international workforce
- Developing future-ready competencies
- Competency analytics and technology-enabled talent systems
- Ethical issues and best practices in talent management

Text Books

- The Talent Management Handbook by Dorothy R Berger and Lance Berger
- The Handbook of Competency Mapping: Understanding, Designing, and Implementing Competency Models in Organizations by Seema Sanghi

Reference Books

- Competencies and (Global) Talent Management by Carolina Machado
- Competency-Based Human Resource Management: A complete text with case studies on competency mapping, modelling, assessing and applying by Srinivas R. Kandula

Managing Working Dynamics and Diversity (MS637)

(PEC 3 Credits 2-0-2-0)

Objective

To enable students to understand and effectively manage workplace dynamics arising from diverse individual, social, and cultural differences. The course focuses on fostering inclusion, collaboration, and productivity through awareness, sensitivity, and strategic interventions.

Course Outcomes

Students will be able to

- Analyze workplace diversity and its impact on team performance and organizational culture.
- Demonstrate skills in managing cross-cultural communication and conflict resolution.
- Design policies and practices promoting inclusivity, equity, and collaboration.
- Evaluate the effectiveness of diversity initiatives and inclusive leadership strategies.

Unit I – Introduction to Workplace Dynamics and Diversity

Understanding workforce diversity: dimensions and types The business case for diversity and inclusion.

Theories of organizational behavior and group dynamics Generational, gender, and cultural differences in workplaces

Unit II – Communication and Interpersonal Effectiveness

Barriers to communication in diverse environments Developing intercultural communication competence Emotional intelligence and empathy at work,
Building trust and collaboration among diverse teams.

Unit III – Managing Conflict and Power Dynamics

Understanding conflict in diverse teams Negotiation and mediation techniques,
Managing bias, stereotypes, and microaggressions Power, politics, and influence in organizational settings

Unit IV – Inclusive Leadership and Team Building

Traits and practices of inclusive leaders Motivating diverse teams,
Managing hybrid and global teams,
Case studies on effective inclusive leadership.

Unit V – Policies, Practices, and Future Trends

Diversity management strategies and frameworks Legal and ethical aspects of workplace inclusion, Measuring and auditing diversity initiatives,
Future of work: globalization, technology, and diversity.

Text Books

- Thomas, R. Roosevelt. Building a House for Diversity: How a Fable About a Giraffe & an Elephant Offers New Strategies for Today's Workforce. AMACOM.
- Robbins, Stephen P., and Judge, Timothy A. Organizational Behavior. Pearson Education.

Reference Books

- Cox, Taylor Jr. Cultural Diversity in Organizations: Theory, Research, and Practice. Berrett-Koehler.
- Gardenswartz, Lee, and Anita Rowe. Managing Diversity: A Complete Desk Reference and Planning Guide. McGraw-Hill.
- Loden, Marilyn. Implementing Diversity. McGraw-Hill Education.

Labour Law and Compensation (MS638)

(PEC 3 Credits 2-0-2-0)

Objective

To develop students' understanding of the concepts and practices of labour relations and employee compensation, enabling them to design fair, equitable, and strategically aligned compensation systems within organisational frameworks.

Course Outcomes

- Explain the key concepts, principles, and objectives of labour relations and employee compensation.
- Analyse the internal and external factors influencing compensation decisions within organisations.
- Design fair and equitable compensation structures aligned with organisational goals and employee performance.
- Evaluate the role of compensation in employee motivation, retention, and organisational effectiveness.
- Apply contemporary compensation strategies to address workforce challenges in dynamic business environments.

UNIT 1: Industrial Relations — An Overview

- Concept and Scope of Industrial Relations
- Industrial Relations and the Indian Constitution
- History and Evolution of Industrial Relations in India
- Theoretical Perspectives: Unitarist, Pluralist, Marxist
- Trade Unionism and Organization of IR in India
- Role of National Commissions on Labour
- Modern Trends and Linkage between IR and HRM/HRD
- Principles of Labour Legislation

UNIT 2: Indian Labour Force

- Growth and Size of the Indian Labour Force
- Sectoral Distribution and Major Occupations
- Characteristics and Challenges of Indian Labour
- Employment Trends in Emerging Sectors
- Labour Administration Machinery in India

UNIT 3: Trade Unions — Concept, Evolution and Functions

- Definition, Objectives, and Reasons for Joining Trade Unions
- Types, Structure, and Theories of Trade Unions
- History and Evolution of Trade Unions in India
- Functions and Methods of Achieving Objectives
- Recommendations of the National Commissions on Labour

UNIT 4: Collective Bargaining

- Concept and Definition of Collective Bargaining
- Significance and Levels of Collective Bargaining
- Process and Prerequisites for Effective Bargaining
- Hindrances and Challenges in Collective Bargaining
- Recommendations of Labour Commissions

UNIT 5: Industrial Discipline and Grievance Handling

- Concept and Importance of Industrial Discipline
- Causes and Forms of Indiscipline
- Grievance Handling: Meaning, Process, and Mechanisms
- Role of HR Managers and Trade Unions in Grievance Management

UNIT 6: Labour Welfare

- Concept, Evolution, and Objectives of Labour Welfare
- Theories and Types of Labour Welfare
- Social Security and Welfare Funds
- Labour Welfare Practices and Schemes in India
- Workers' Education, Training, and Employment Security

UNIT 7: Wages, Government Policies on Labour and Five-Year Plans

- Role of the State in Industrial Relations
- Theories of Wages and Wage Determination
- Wage Policy, Wage Boards, and Labour Policy Reforms
- Labour and Five-Year Plans
- Recommendations of Labour Commissions

Text book

- Industrial Relations and Labour Laws by Piyali Gosh and Shefali Nandan

Reference Books

- Compensation Management and Labour Legislation by Dr A. M. Sarma
- Handbook of Labour & Industrial Law by P.L. Malik
- Law of Damages and Compensation (3 volumes) by C. Kameshwara Rao

International Human Resource Management (MS639)

(PEC 3 Credits 2-0-2-0)

Objective

To equip students with the knowledge and skills to understand, apply, and evaluate international human resource management practices for effectively managing and developing organisations in a global context.

Course Outcomes

- Gain conceptual knowledge and practical experience in understanding HR concepts globally.
- Comprehend and correlate the strategic approaches to HR aspects among Parent Country Nationals (PCNs), Third Country Nationals (TCNs), and Host Country Nationals (HCNs).
- Develop knowledge and apply the concepts of HR in a global perspective.
- Have better insight into HR concepts, policies, and practices by critically analysing the impact of contemporary issues globally.

Chapter 1: Introduction to IHRM

- Definition of IHRM.
- The different settings of International Human Resource Management.
- Development of IHRM.
- Difference between IHRM and Domestic HRM.
- IHRM Strategies.
- Barriers in effective global HRM.
- Socio-cultural context, organisational dynamics & IHRM: Role of culture in International HRM, Country and Regional Cultures.
- Country–culture versus MNE-culture; culture and employee management issues; impact of country culture on IHRM.

Chapter 2: Strategies for International Growth

- Exploiting global integration – the logic of global integration and differentiation.
- Localization: Becoming locally responsive—understanding diversity, responding to diversity, the challenges of localization.
- Mastering expatriation; beyond the traditional expatriate model; the limits of global integration.

Chapter 3: International Workforce Planning and Staffing

- International labour market.
- International recruitment function (e-recruitment, head-hunters, cross-national advertising).
- International staffing choices: approaches to multinational staffing decisions.
- Types of international assignments.
- Selection criteria and techniques: tests, interviews for international selection.
- International staffing issues: female expatriation, repatriation, successful expatriation, role of an expatriate, re-entry, career issues.

Chapter 4: Developing Global Mindset – Global Leadership

- Global leadership: cross-cultural context and international assignees.

- Training and development of international staff: current scenario; types of expatriate training; sensitivity training.
- Career development, repatriate training, developing international staff and multinational teams, knowledge transfer in multinational companies.

Chapter 5: Performance Management

- Performance management in MNEs: performance management and MNEs; constraints in goal attainment.
- Performance management of international assignees, host-country and third-country employees.
- Issues and challenges in international performance management; country-specific performance management practices.

Chapter 6: International Compensation and International Employment Laws

- International compensation and international assignees: forms of compensation; key components; approaches; emerging issues.
- Establishment of labour standards by international institutions.
- The global legal and regulatory context of MNEs.

Text Books

- International Human Resource Management by Peter J. Dowling, Marion Festing, Allen Engel; Cengage Learning.
- International Human Resource Management by Monir H. Tayeb; Oxford University Press, 2005.
- Human Resource Information Systems: Basics, Applications, and Future Directions by Michael J. Kavanagh, Mohan Thite, Richard D. Johnson; SAGE, 2011 (2nd ed.).

Reference Books

- International Human Resource Management: Text and Cases by P. L. Rao; Excel Books.
- International Human Resource Management: Policies and Practices by Dennis Briscoe, Randall Schuler, Ibraiz Tarique; Taylor & Francis (4th ed., 2012).
- International Human Resource Management by Anne-Wil Harzing, Joris Van Ruysseveldt; SAGE, 2004.
- International Human Resource Management: Think Globally, Act Locally by Derek Torrington; Prentice Hall, 1994.

Employer Brand Building (MS640)

(PEC 3 Credits 2-0-2-0)

Objective

To make students understand the value of employer brands and how attracting the best employees with optimum resources and perks can help the organisation grow.

Course Outcomes

Students will benefit from understanding the concept of employer branding and how it is related to increase employee performance and reduced attrition. Students will be exposed to the various techniques and endeavors of the organization to create an employer brand.

Course plan:

Unit 1: Introduction to branding, evolution of employer branding, external and internal employer branding

Unit 2: Understanding EVP, models of employer branding, various scales in employer branding, measuring employer branding

Unit 3: Relation of employer branding with employee performance and retention, ways of achieving an employer brand

Unit 4: Limitations of employer branding, practical aspects and ranking of organizations according to employer branding

Text Books:

- Simon Barrow and Richard Mosley :The Employer Brand: Bringing the Best of Brand Management to People at Work
- Jeanne C Meister : The 2020 Workplace: How Innovative Companies Attract, Develop, and Keep Tomorrow's Employees Today

Emotional Intelligence and Leadership (MS641)

(PEC 3 Credits 2-0-2-0)

Objective

To let the students understand the basics of emotional quotient and how it is connected to leadership.

Course Outcomes

Students will develop their emotional quotient which is quite important than IQ. The leaders can guide their employees with their leadership skills in EQ as it helps in handling teams and managing the workforce

Course plan:

Unit 1: Introduction to EQ, Emotions and the Tripartite Brain, Emotional Competencies.

Unit 2: Executive EQ, Emotions and Enneagram, Rational Emotive Therapy

Unit 3: Emotional Transformation, Script Analysis using Enneagram, Measuring Emotional Intelligence.

Unit 4: Emotions and Childhood, Role of Emotions, Emotions and Attitudes

Text Books

- Goleman, Daniel (1996). Emotional Intelligence: Why It Can Matter More Than IQ. Bantam Books.

Reference Books

- Travis Bradberry, Emotional Intelligence 2.0 Hardcover.
- “Handbook of Emotional Intelligence.” by R. Bar-On and J.D.A.Parker, 2000
- San Francisco: Jossey-Bass.
- “The Emotional Quotient Inventory (EQ-i) A test of emotional intelligence, Toronto, Canada: Multi-Health Systems, Inc.
- “The Emotional Competence Inventory (ECI) by R.E.Boyantzis and D. Goleman, 2001 Boston: Hay Group
- “The Emotional Intelligence Quick Book” by Travis Bradberry and Jean Greaves, 2005 New York City, Rockefeller Center, Fireside Publishing.

Creativity and Innovation (MS642)

(PEC 3 Credits 2-0-2-0)

Objective:

To let the students understand the importance of creativity and innovation in organizations.

Course Outcomes

Students will learn the various techniques of creativity and innovation and how they can be applied in organisations. The expected outcome is to train the students practically so that they take innovative and creative steps towards problem-solving.

Course plan:

Unit 1: Managing Creativity: An Overview, Understanding Creativity.

Unit 2: Unblocking Creative Potential, Creative Person and Process

Unit 3: Creativity Techniques (Brainstorming; lateral Thinking; Forced Relationship; Morphological Analysis; Attribute Listing.) , Creativity in Organizations

Unit 4: Managing Creativity in Organization, Strategies for Innovation

Text Books:

- Elaine Biech, Creativity and Innovation: The ASTD Trainer's Sourcebook, McGraw Hill Professional.

Reference Books:

- Managing Creativity and Innovation (Harvard Business Essentials), Harvard Business School Press.
- Alan G. Robinson Sam Stern, Corporate Creativity, Berrett-Koehler Publishers.

Course Curriculum

MBA

Elective Baskets

Basket 5 : Information Technology Management

PCC: Program Core Course, PEC: Program Elective Course, SEC: Skill Enhancement Course HSMC: Humanities, Social Science, and Management Course, ELC: Experiential Learning Course

IT Governance (MS643)

(PEC 3 Credits 2-0-2-0)

Objective

This course helps MBA students understand how to establish effective IT governance frameworks that align technology initiatives with business strategy, manage risks, and ensure value delivery from IT investments.

Course Outcome

By the end of the course, students will be able to interpret IT governance principles, design governance structures and policies, implement decision-making and accountability models, evaluate performance metrics and control mechanisms, and ensure that IT enables strategic business objectives while managing associated risks.

Foundations of IT Governance

- Meaning, scope, and importance of IT governance in enterprises.
- Governance versus management; principles and objectives of IT governance.
- Relationship with corporate governance and enterprise strategy.
- Stakeholders, decision rights, accountability, and transparency in IT.

Frameworks and Models

- Overview of COBIT, ISO/IEC 38500, ITIL governance practices, and NIST governance perspectives.
- Components and enablers of COBIT: principles, objectives, system of governance, and design factors.
- Governance structures: IT steering committees, portfolio boards, and executive roles (CIO, CISO).
- Linking governance to architecture, risk management, and service management.

Strategic Alignment and Value Delivery

- Aligning IT goals with organizational strategy and balanced scorecard perspectives.
- IT investment and portfolio management; business case and prioritization.
- Value realization, benefits tracking, and outcome measurement.
- Performance indicators, benefits realization frameworks, and continual improvement.

Risk, Compliance, and Control

- IT governance in enterprise risk management context; identifying and classifying IT risks.
- Integrated control frameworks (COBIT, COSO, ISO 27001)
- Governance of data, cybersecurity, and privacy; policy and compliance monitoring.
- Third-party governance, contracts, SLAs, and assurance mechanisms.

Performance Measurement and Maturity

- Performance measurement: KPIs, KRIs, and dashboards for IT governance.
- Maturity models and benchmarking; setting governance improvement roadmaps.
- Governance audits, reporting, and feedback loops for continual enhancement.

Emerging Practices and Trends

- Governance challenges in digital transformation, cloud, agile, and DevOps environments.
- AI and data governance principles; ethical and sustainable IT governance.
- Integrating governance for cybersecurity, ESG, and IT cost management.

Text Books

- Peter Weill and Jeanne W. Ross, *IT Governance: How Top Performers Manage IT Decision Rights for Superior Results*, Harvard Business Review Press.

Reference Books

- Van Grembergen, Wim and De Haes, Steven, *Enterprise Governance of IT: Achieving Alignment and Value*, Springer.
- ISO/IEC 38500, *Corporate Governance of Information Technology*.
- ISACA, *COBIT 2019 Design Guide and Implementation Guide*.
- ISACA, *COBIT 2019 Framework: Governance and Management Objectives*, ISACA Publications.

Cybersecurity Strategy (MS644)

(PEC 3 Credits 2-0-2-0)

Objective

To help students understand cyber risk and lead organization-wide security strategies that protect the business and support its goals.

Course Outcomes

Students will be able to

- evaluate enterprise cyber risk, design governance and policies
- develop executive metrics and dashboards
- lead incident response and resilience actions
- meet legal and board-level obligations, and
- manage third-party and supply-chain risks to align security with business objectives.

Introduction, Cyber Risk and Threat Landscape

Why cybersecurity matters for modern enterprises; strategic, financial, and reputational impacts at the executive level; the business case for integrating cyber into strategy and operations across the organization. Threat actors and vectors, business impacts, and human factors as core exposures.

Managing Risk

Risk ownership and alignment to enterprise risk management; qualitative and quantitative assessment methods; prioritization and resource allocation.

Strategy and Governance

Embedding cybersecurity into corporate strategy, culture, and decision processes; leadership roles, accountability, and operating model integration. Executive oversight of policies, standards, and control baselines; aligning policies with strategic objectives and change management practices.

Metrics and Dashboards

Key performance and risk indicators; board-level dashboards; benchmarking and using metrics to justify investments and track outcomes.

Incident Response and Resilience

Executive playbooks; crisis management and communications; business continuity and disaster recovery integration; coordination with legal and law enforcement.

Legal, Regulatory, and Compliance

Disclosure duties and liability; mapping regulatory obligations to risk strategy; privacy, data protection, and sectoral requirements.

Third-Party and Supply Chain Risk

Vendor risk management and secure procurement; contractual controls, assurance mechanisms, continuous monitoring, and concentration risk.

Text Books

- Gregory J. Touhill and C. Joseph Touhill, *Cybersecurity for Executives: A Practical Guide*, Wiley.

Reference Books

- Larry Clinton (ed.), *Cybersecurity for Business: Organization-Wide Strategies to Ensure Cyber Risk Is Not Just an IT Issue*, Kogan Page.

Cloud Computing for Business (MS645)

(PEC 3 Credits 2-0-2-0)

Objective

This syllabus balances business and technical aspects, ensuring MBA students are well-prepared for cloud strategy, decision-making, and digital transformation roles.

Course Outcomes:

Students will be able to

- Have knowledge and skills about the fundamentals and essentials of Cloud Computing technologies, applications and implementations.
- Realize cloud infrastructures, generate ideas and innovations in cloud computing using virtualization
- Gain knowledge about the security in Cloud Computing.
- Learn the application of recent Cloud Technologies

Introduction to Cloud Computing

Introduction to Cloud Computing – Definition of Cloud – Evolution of Cloud Computing – Cloud Models – Cloud Characteristics – Cloud Computing Characteristics – Essentials – Benefits, Business and IT perspective

History of Centralized and Distributed Computing - Overview of Distributed Computing, Cluster computing, Grid computing.

Cloud Types & Services

Cloud Services Requirements, Cloud Deployment Models: Public, Private, Hybrid, Multi-cloud, Cloud Service Models: Infrastructure as a Service (IaaS), Platform as a Service (PaaS), Software as a Service (SaaS)

Cloud Architecture, Storage & Offerings

Cloud Architecture -Layered, NIST Cloud Computing Reference Architecture, Service Oriented Architecture – IaaS – PaaS – SaaS – Architectural Design Challenges

Cloud Virtualization Technology:

Cloud and Virtualization -Basics of Virtualization – Types of Virtualizations Virtualization Defined – Virtualization Benefits – Server Virtualization – Hypervisor Management Software, Storage virtualization, Virtual Machine Security , IAM.

Cloud Adoption Strategy & Digital Transformation

Factors Driving Cloud Adoption, Cloud Adoption Frameworks, Business Model Transformation with Cloud Computing, Cost-Benefit Analysis and ROI Evaluation, Cloud Service Level Agreements (SLAs) and Contracts, Vendor Lock-in and Multi-Cloud Strategies, Cloud Migration Strategies: Lift-and-Shift, Re-platforming, Re-architecting, Service Oriented Architecture – REST and Systems of Systems – Web Services– Publish-Subscribe Model

Cloud-Based Business Applications

Cloud Providers– AWS , Overview on Amazon AWS and Microsoft Azure – Overview on Google App Engine – Emerging Cloud software Environment.

Cloud-based ERP (SAP, Oracle Cloud, NetSuite), Cloud-based CRM (Salesforce, HubSpot), Cloud in E-commerce, FinTech, Healthcare, and Manufacturing, Case Studies of Companies.

Text Books:

- Business in the Cloud: What Every Business Needs to Know About Cloud Computing. Hugos, M. and H., Derek, John Wiley and Sons, 2011.
- Enterprise cloud computing: technology, architecture, applications. Shroff, G, Cambridge University Press, 2010.
- Guide to Cloud Computing for Business and Technology Managers: From Distributed Computing to Cloudware Applications. Kalve, V, CRC Press, 2014.

Reference Books

- Rhoton, John; Cloud Computing Explained: Implementation Handbook for Enterprises; Kindle Edition
- Linthicum, David S.; Cloud Computing and SOA Convergence in your Enterprise: A StepbyStep Guide; Addison Wesley Information Technology Series

Search Engine Optimization (MS646)

(PEC 3 Credits 2-0-2-0)

Objective

Equip students to plan, execute, and measure effective SEO..

Course Outcomes

Students will be able to

Design SEO-ready sites, implement on-page and technical optimization, conduct keyword research and mapping, develop content and link strategies, and measure performance through audits and analytics.

Introduction

Role of search in user behavior and commerce; SERP composition; how people search and what engines optimize for. Crawling, indexing, ranking factors, personalization, and interpreting algorithmic behavior.

Keyword Research

Research methods and tools, evaluating value and difficulty, long-tail strategy, seasonality, and keyword portfolios.

SEO-Friendly Website

Crawl accessibility, architecture/navigation, domains vs subdomains, URL design, HTML tags, duplicate content, redirects, CMS considerations, multilingual/geo-targeting.

Content Optimization and Quality

Search intent alignment, semantic structure, depth and originality, engagement, and cannibalization avoidance.

Link Strategy

Link signals and evaluation, content-led acquisition, digital PR, outreach ethics, and risk/penalty avoidance.

Vertical Search

Local, image, product, news/blog, and video optimization; structured data for enhanced discovery.

Measurement and Audits

Analytics and search tools, KPI dashboards, auditing site health, rank and traffic tracking, competitive analysis.

Evolution of Search

Mobile, local, voice, generative-AI-influenced experiences, and adapting roadmaps to ongoing changes.

Text Books

- Eric Enge, Stephan Spencer, Jessie Stricchiola, The Art of SEO, 4th Edition, O'Reilly

Reference Books

- Ledford, J. L. (2008). SEO: Search Engine Optimization Bible. Germany: Wiley.

Software Project Management (MS647)

(PEC 3 Credits 2-0-2-0)

Objective

This course helps MBA students understand how to plan, execute, monitor, and close software projects that deliver business value on time, within budget, and with quality.

Course Outcomes

By the end of the course, students will be able to create project plans with scope, schedule, and budget baselines, manage risks and stakeholders, apply appropriate methodologies, track progress with metrics and controls, and ensure successful delivery through quality assurance, change management, and lessons learned.

Project Foundations and Planning

- Project lifecycle phases: initiation, planning, execution, monitoring, and closure.
- Project charter, business case, and stakeholder analysis; defining scope, deliverables, and success criteria.
- Work breakdown structure (WBS); estimating effort, duration, and resources (story points, function points, parametric).
- Schedule development using CPM, PERT, and critical chain; resource allocation and leveling.

Budgeting and Procurement

- Cost estimation, budgeting, and earned value management (EVM) fundamentals.
- Procurement planning: make-vs-buy, RFPs, vendor selection, contracts, and SLAs.
- Cost control, contingency planning, and financial reporting for software projects.

Risk and Quality Management

- Risk identification, qualitative/quantitative analysis, response planning, and monitoring.
- Quality planning and assurance; metrics, reviews, and defect management.
- Testing strategy integration: unit, integration, system, UAT, and regression testing.

Communication and Reporting

- Stakeholder communication plans; status reporting, dashboards, and escalation procedures.
- Progress tracking tools and visualization; variance analysis and forecasting.

Execution, Monitoring, and Control

- Project execution: task assignment, progress tracking, and issue management.
- Change control processes; scope creep prevention and impact assessment.
- Performance measurement: schedule variance, cost variance, SPI, CPI, and forecasting.

Methodologies and Delivery Models

- Traditional (waterfall) vs. agile methodologies; hybrid approaches for software delivery.
- Scrum, Kanban, and SAFe frameworks; iteration planning and release management.
- DevOps integration: CI/CD pipelines, deployment automation, and monitoring.

Project Closure and Continuous Improvement

- Acceptance criteria, go-live planning, and handover to operations/support.
- Lessons learned, post-implementation review, and benefits realization tracking.
- Portfolio management context; scaling project success to program and portfolio levels.

Text Books

- Kathy Schwalbe, *Information Technology Project Management*, Cengage Learning.
- Ramesh Gopalaswamy, *Software Project Management*, McGraw-Hill.

Reference Books

- PMI, *A Guide to the Project Management Body of Knowledge (PMBOK Guide)*.
- Mike Cohn, *Agile Estimating and Planning*.
- Gene Kim, Jez Humble, et al., *The DevOps Handbook*.

Business Intelligence (MS648)

(PEC 3 Credits 2-0-2-0)

Objective

This course provides an introduction to the concepts of business intelligence (BI) as components and functionality of information systems. It explores how business problems can be solved effectively by using operational data to create data warehouses, and then applying data mining tools and analytics to gain new insights into organizational operations.

Course Outcomes

Students will be able to

- Understanding the role of BI and analytics in business.
- Applying data analysis techniques to solve business problems.
- Developing effective data visualizations.
- Using BI tools for reporting and decision-making.
- Understanding the principles of data management and warehousing.

Introduction to Business Intelligence

Evolving Needs for Decision Support and Analytics, Decision-Making Processes and Computerized Decision Support Framework, Evolution of Computerized Decision Support to Analytics/Data Science, A Framework for Business Intelligence, Analytics Overview.

Business Intelligence and Data Management

Basic Reporting and Querying - Online Analytical Processing - OLAP Techniques – Fundamentals of data management, Online Transaction Processing (OLTP), Relational databases, Fundamentals of data warehousing, including data modeling techniques, data integration strategies, and ETL (Extract, Transform, Load) processes.

Business Analytics

Exploring various data analysis techniques, such as descriptive, diagnostic, predictive, and prescriptive analytics. Learning about data mining processes, algorithms, and techniques for discovering patterns and insights in data.

Text Analytics and Text Mining Overview, Natural Language Processing (NLP), Text Mining Process, Web Mining Overview, Social Analytics. Understanding the importance of data visualization, exploring different visualization techniques, and using tools to create effective visualizations.

Ethics and “Big Data”

Social and business implications of “Big Data”, Discussion of the impact of technology, maturity, and strategy on future business performance. Business Intelligence Emerging Trends and Future Directions.

Text Books

- Business Intelligence, Analytics, and Data Science: A Managerial Perspective by Dursun Delen, Efraim Turban, and Ramesh Sharda
- Han, J., Pei, J. & Tong H. (2023). Data Mining Concepts and Techniques, 4th ed, New Delhi: Elsevier.

Course Curriculum

MBA

Elective Baskets

Basket 6 : Entrepreneurship Development

PCC: Program Core Course, PEC: Program Elective Course, SEC: Skill Enhancement Course HSMC: Humanities, Social Science, and Management Course, ELC: Experiential Learning Course

Entrepreneurial Marketing & Growth (MS649)

(PEC 3 Credits 2-0-2-0)

Objective

To enable students to create and execute effective marketing strategies for startups and innovative ventures.

Course Outcomes

Students will be able to

- Apply entrepreneurial marketing principles to identify and engage early adopters.
- Design go-to-market strategies for startups and innovative ventures.
- Develop growth hacking tactics for rapid customer acquisition and retention.
- Build strong entrepreneurial brands and positioning strategies.
- Craft and present professional marketing and growth pitches.

Foundations of Entrepreneurial Marketing

Characteristics of entrepreneurial marketing vs. traditional marketing, Unique challenges of startups in resource constrained environments, Customer discovery and validation: Lean Startup approach, Identifying target markets, early adopters, and beachhead markets, Entrepreneurial value proposition design.

Marketing Strategy & Go 2 Market Design

Building a go 2 market (G2M) strategy for new ventures, segmentation, targeting, and positioning (STP) in entrepreneurial contexts, Pricing strategies for startups: penetration, freemium, and value-based pricing, Channels of distribution: direct vs. digital first approaches, Metrics for measuring early market traction.

Entrepreneurial Economics & Feasibility Analysis

Digital marketing fundamentals: SEO, SEM, content marketing, and social media, Performance marketing: key metrics, tracking, and optimization, Growth hacking strategies: viral loops, referral systems, gamification, and freemium models, Entrepreneurial branding and positioning in competitive markets, Customer acquisition vs. retention: lifetime value and loyalty strategies.

Strategic Modeling, Scaling & Pitch Preparation

Strategies for scaling growth in domestic and international markets, Storytelling for entrepreneurs: communicating vision and brand narrative, designing persuasive growth-oriented pitch decks, Do's and don'ts when pitching marketing and growth strategies to investors.

Text Books

- Morris, M., Schindehutte, M., & LaForge, R. Entrepreneurial Marketing: A Global Perspective
- Kuratko, D. F., & Hodgetts, R. M. Entrepreneurship: Theory, Process, Practice (Latest Edition)
- Chaffey, D. & Ellis-Chadwick, F. Digital Marketing: Strategy, Implementation and Practice (Latest Edition)
- Hollensen, S. Global Marketing (Latest Edition)

Reference Books

- Holiday, R. Growth Hacker Marketing
- Blank, S., & Dorf, B. The Startup Owner's Manual
- Godin, S. This is Marketing
- Ries, E. The Lean Startup

Legal & Ethical Aspects of Entrepreneurship (MS650)

(PEC 3 Credits 2-0-2-0)

Objective

To familiar students with legal, ethical, and regulatory aspects of entrepreneurship while protecting and managing business and intellectual property assets.

Course Outcomes

Students will be able to

- Understand the legal frameworks governing entrepreneurship and business incorporation.
- Identify and protect intellectual property (IP) assets.
- Draft, interpret, and negotiate contracts relevant to startups.
- Apply ethical reasoning to entrepreneurial decision-making.
- Evaluate regulatory, compliance, and governance challenges in entrepreneurial ventures.

Introduction to Legal Framework for Entrepreneurs

Legal forms of business: proprietorship, partnership, LLP, private limited, public limited, etc., Process of incorporation and registration (with special reference to India & global perspectives), Regulatory environment: licenses, permits, compliances, Basics of taxation and labor laws affecting startups.

Intellectual Property Rights (IPR) in Entrepreneurship

Introduction to IPR: patents, trademarks, copyrights, designs, trade secrets, Importance of IP in startups and SMEs, Procedures for registration and protection of IP (national & international), IP commercialization: licensing, franchising, technology transfer.

Contracts, Agreements & Legal Obligations

Essentials of a valid contract, Types of contracts: employment, vendor, partnership, investor agreements, NDAs, licensing agreements, Drafting and interpreting key clauses, Dispute resolution: arbitration, mediation, litigation.

Ethics, Governance & Contemporary Issues

Ethical challenges in entrepreneurship (fraud, corruption, exploitation, sustainability issues),

Corporate governance in startups and growing firms, Social responsibility and impact entrepreneurship, Global perspectives on business ethics.

Text Books

- Bagley, C. E. Managers and the Legal Environment: Strategies for the 21st Century
- Cheeseman, H. R. Business Law
- Fernando, A. C. Business Ethics and Corporate Governance
- N.D Kapoor; Mercantile law

Reference Books

- Damodaran, A. Legal Aspects of Business
- Harvard Business Review articles on business ethics and governance
- Relevant Acts & Regulations (Companies Act, 2013; Indian Contract Act, 1872; IP laws; Arbitration and Conciliation Act, 1996, etc.)

Entrepreneurial Strategy (MS651)

(PEC 3 Credits 2-0-2-0)

Objective

To equip students with the skills to identify market opportunities, apply strategic innovation, and design economically viable business models.

Course Outcomes

Students will be able to

- Identify and analyze market gaps and emerging opportunities
- Apply strategic innovation frameworks such as Blue Ocean Strategy and Disruption Theory
- Understand core concepts of entrepreneurial economics (e.g., scarcity, opportunity cost, pricing, risk)
- Design, evaluate, and present a strategic business model supported by economic feasibility

Entrepreneurial Strategy & Opportunity Recognition

Defining entrepreneurship and strategic opportunity, Opportunity recognition and market gap analysis, Disruptive Innovation (Christensen), Strategic thinking for entrepreneurs

Innovation Frameworks & Business Model Design

Blue Ocean Strategy: Creating uncontested market space, Value Innovation and Strategy Canvas, Introduction to the Business Model Canvas (BMC), Business Model Ideation and Mapping.

Entrepreneurial Economics & Feasibility Analysis

Scarcity, trade-offs, and opportunity cost, Startup pricing and behavioral economics, Market failure and regulatory economics, Feasibility analysis: cost structure, unit economics and risk.

Strategic Modeling, Scaling & Pitch Preparation

Business model innovation strategies, Entrepreneurial ecosystems and competition, Scaling strategies and growth economics, Pitch deck development and demo day prep

Text Books

- Osterwalder, A., & Pigneur, Y. (2010). *Business Model Generation: A Handbook for Visionaries, Game Changers, and Challengers*. Wiley. (Practical guide for Business Model Canvas and innovation techniques)
- Christensen, C. M. (1997). *The Innovator's Dilemma: When New Technologies Cause Great Firms to Fail*. Harvard Business Review Press. (Classic book on disruption and entrepreneurial innovation.)
- Kim, W. C., & Mauborgne, R. (2015). *Blue Ocean Strategy (Expanded Edition): How to Create Uncontested Market Space and Make the Competition Irrelevant*. Harvard Business Review Press. (Foundation for value innovation and blue ocean thinking).
- Read, S., Sarasvathy, S. D., Dew, N., & Wiltbank, R. (2017). *Effectual Entrepreneurship*. Routledge. (Advanced take on effectuation and entrepreneurial logic)
- Blank, S. (2013). *The Startup Owner's Manual: The Step-by-Step Guide for Building a Great Company*. Wiley. (Applied Lean Startup methodology and customer development process)

Reference Books

- Teece, D. J. (2010). Business Models, Business Strategy and Innovation. *Long Range Planning*, 43(2–3), 172–194.
- Eisenmann, T. R. (2013). *Entrepreneurial Strategy: From the Founder's Perspective*. Harvard Business School Module Note.
- Amit, R., & Zott, C. (2001). Value Creation in E-Business. *Strategic Management Journal*, 22(6–7), 493–520.
- Shane, S. (2003). *A General Theory of Entrepreneurship: The Individual–Opportunity Nexus*. Edward Elgar.
- Ries, E. (2011). *The Lean Startup: How today's Entrepreneurs Use Continuous Innovation to Create Radically Successful Businesses*. Crown Publishing

Innovation, Effectuation & Feasibility (MS652)

(PEC 3 Credits 2-0-2-0)

Objective

To equip students with the skills to develop, test, and refine innovative products using design thinking, lean startup methods, and effective customer validation.

Course Outcomes

Students will be able to

- Apply design thinking and lean startup methodologies to product development.
- Build and present MVPs using both traditional and no-code prototyping tools.
- Conduct customer discovery through interviews, usability testing, and field validation.
- Iterate and pivot product ideas based on structured feedback.
- Communicate MVP ideas effectively using storytelling and product positioning.

Foundations of MVP & Design Thinking

Introduction to Design Thinking & Innovation; Minimum Viable Product (MVP), Concepts, Types, and Importance; role in the product development lifecycle. Rapid Prototyping Tools and Techniques (sketching, wire framing, mockups, no-code tools)

Customer Discovery & Validation

Customer Discovery Methods (interviews, surveys, ethnographic studies); Role of feedback loops in product development; Usability Testing Basics; Lean Startup & Agile Development Frameworks.

Iteration, Pivoting & Product Storytelling

Presenting MVPs & Receiving Peer Feedback; Iteration Strategies & Pivoting Techniques; Storytelling for Entrepreneurs: Building a compelling product narrative; Product Positioning & Go-to-Market Readiness; Usability Testing Metrics and Analysis.

Building & Scaling

Building No-Code MVPs (tools like Bubble, Glide, Figma, etc.); Strategies for Scaling MVPs into Products; Preparing for Final Demo Day; Storyboarding, Pitching, and Team Coaching.

Text Books

- Innovation and Entrepreneurship (Bessant & Tidd)
- Effectual Entrepreneurship (Sarasvathy et al)
- Entrepreneurship: Successfully Launching New Ventures (Bruce Barringer and R. Duane Ireland)
- Innovation and Entrepreneurship (Kennard)
- Entrepreneurship (11th Edition)

Reference Books

- Eric Ries (2011) The Lean Startup: How Today's Entrepreneurs Use Continuous Innovation to Create Radically Successful Businesses
- Steve Blank & Bob Dorf (2012) The Startup Owner's Manual: The Step-by-Step Guide for Building a Great Company
- Alexander Osterwalder & Yves Pigneur (2010) Business Model Generation: A Handbook for Visionaries, Game Changers, and Challengers
- Ash Maurya (2012) Running Lean: Iterate from Plan A to a Plan That Works
- Jake Knapp, John Zeratsky & Braden Kowitz (2016) Sprint: How to Solve Big Problems and Test New Ideas in Just Five Days
- Marty Cagan (2018) Inspired: How to Create Tech Products Customers Love
- Alistair Croll & Benjamin Yoskovitz (2013) Lean Analytics: Use Data to Build a Better Startup Faster
- Feasibility Study: A Practical DIY Guide for SME Projects
- Feasibility Studies 1st Edition (eBook)

Product Development & MVP Design (MS653)

(PEC 3 Credits 2-0-2-0)

Objective

To enable students to develop, test, and validate innovative products using design thinking, lean startup, and agile methods.

Course Outcomes

Students will be able to

- Understand the principles of product development, design thinking, and lean startup.
- Identify customer pain points and design value-driven solutions.
- Build MVPs (digital, physical, or service-based) to test assumptions.
- Apply agile and iterative approaches for product-market fit.
- Pitch product ideas supported by MVP validation to stakeholders and investors.

Introduction to Product Development & MVPs

Fundamentals of product development: idea to launch, understanding customer needs and market research, Principles of lean startup methodology, Defining MVP: scope, purpose, and examples.

Customer Discovery & Design Thinking

Techniques for customer discovery and validation, Empathy mapping & customer journey mapping, Ideation tools and brainstorming technique, Introduction to design thinking for product innovation, selecting features for MVP: prioritization frameworks (Must have, should have, could have, Won't have (MoSCoW), Kano Model, etc.)

MVP Building & Testing

Types of MVPs: landing page, prototype, concierge, Wizard of Oz, digital mockups, Tools & platforms for rapid prototyping (Figma, Canva, low-code/no-code tools), Building testable MVPs: hypotheses, metrics, KPIs, Experimentation & feedback loops, Iteration and pivoting strategies.

Product Launch, Scaling & Project Work

Transitioning from MVP to Minimum Marketable Product (MMP), Go-to-market strategies and scaling challenges, agile product management and sprint planning, Risk management in product launches

Text Books

- Ries, E. The Lean Startup
- Blank, S. The Four Steps to the Epiphany
- Maurya, A. Running Lean

Reference Books

- Cagan, M. Inspired: How to Create Tech Products Customers Love
- Ulwick, A. W. Jobs to be Done: Theory to Practice
- Kelley, T., & Kelley, D. Creative Confidence
- Selected Harvard Business Review and MIT Sloan articles on product development and MVP strategies.

Startup Finance & Fundraising (MS654)

(PEC 3 Credits 2-0-2-0)

Objective

To equip students with the skills to manage startup finances, create financial models, and effectively pitch to investors.

Course Outcomes

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

- Build detailed financial models for startups.
- Analyze unit economics, burn rate, and runway.
- Understand startup valuation methods and fundraising strategies.
- Design a cap table and plan equity distribution.
- Craft a professional investor pitch with financial projections.

Foundations of Startup Finance

Characteristics of startups and their financial challenges, Basics of startup financial statements: Profit & Loss (P&L), balance sheet, and cash flow statements, Introduction to unit economics: Customer Acquisition Cost (CAC), Lifetime Value (LTV), Customer Attrition Rate (churn), Average Revenue Per User (ARPU). Understanding burn rate, runway, and break-even analysis. Financial implications of early-stage decisions and resource allocation.

Financial Modeling for Startups

Building financial projections: revenue models, cost structures, and growth assumptions, Scenario analysis and sensitivity testing for startup planning, Cash flow forecasting and working capital management, integrating financial statements into a cohesive model, Assessing financial sustainability and scalability of business models.

Startup Valuation & Fundraising Strategies

Startup valuation methods: Discounted Cash Flow (DCF), Comparable Company Analysis (CCA), Venture Capital (VC) method, bootstrapping vs. external funding: pros, cons, and strategic implications, Sources of startup finance: angel investors, venture capital, crowdfunding, accelerators, and government grants, designing a cap table and understanding equity dilution, Negotiation fundamentals for fundraising and term sheets.

Investor Readiness & Financial Pitching

Key elements of a winning investor pitch: financials, projections, and funding requirements, Do's and don'ts in presenting financial plans to investors.

Text Books

- Sahlman, W. A. How to Write a Great Business Plan
- Damodaran, A. Investment Valuation: Tools and Techniques for Determining the

- Value of Any Asset
- Timmons, J. A., & Spinelli, S. New Venture Creation: Entrepreneurship for the 21st Century
- Cassar, G. Entrepreneurial Finance

Reference Books

- Mullins, J., & Komisar, R. Getting to Plan B: Breaking Through to a Better Business Model
- Pinson, L. Anatomy of a Business Plan: The Step-by-Step Guide to Building a Business and Securing Capital
- Gompers, P, & Lerner, J. The Venture Capital Cycle
- Blank, S., & Dorf, B. The Startup Owner's Manual

Course Curriculum

MBA

Elective Baskets

Basket 7 : Agri – Business Management

PCC: Program Core Course, PEC: Program Elective Course, SEC: Skill Enhancement Course HSMC: Humanities, Social Science, and Management Course, ELC: Experiential Learning Course

Agricultural Renewable Energy (MS655)

(PEC 3 Credits 2-0-2-0)

Objective

To acquaint students with renewable energy systems applicable to agriculture and enable integration of IoT-based monitoring for efficient, sustainable farm energy management.

Course Outcomes

Students will be able to

- apply renewable energy solutions across agricultural operations.
- design and monitor energy systems using IoT-based tools.
- evaluate techno-economic feasibility of solar, wind, and bioenergy projects.
- integrate data-driven decision systems for sustainable energy management.

Introduction

Energy use patterns in agriculture; role of renewable energy in sustainable agricultural growth; overview of solar, wind, biomass, biogas, hydro, geothermal energy; energy efficiency in irrigation, greenhouses, and processing; national initiatives including National Solar Mission and PM-KUSUM.

Solar and Wind Energy Systems

Solar photovoltaic and solar thermal technologies; solar-powered irrigation, drying, and climate-controlled greenhouses; wind-based pumping and small-scale mechanical systems; comparative techno-economic analysis; IoT-enabled monitoring of renewable energy generation and consumption.

Bioenergy and Waste-to-Energy Systems

Biomass sources including crop residue, livestock waste, agro-industrial byproducts; biogas digester design, operations, and economics; biofuels for farm machinery; IoT sensors for digester pressure, gas composition, leak detection; circular economy approaches and waste valorization.

IoT-Based Energy and Farm Management

IoT architecture and sensor networks in agriculture; smart metering and remote monitoring; precision energy use in irrigation, fertigation, crop systems; cloud platforms and analytics for real-time optimization; integration with decentralized renewable microgrids.

Policy, Finance, and Sustainability

Government schemes, subsidies, regulatory frameworks; PPP models for rural energy infrastructure; carbon credits, CDM, emission trading mechanisms; environmental and socio-economic implications; strategic planning for sustainable agribusiness energy systems.

Case Studies & Practical Applications

IoT-enabled solar irrigation in Rajasthan & Gujarat; smart dairy waste-to-energy models (e.g., Stellapps); agrivoltaic crop-solar land use systems; decentralized microgrids under NREGA programs.

Text Books

- Boyle, G. *Renewable Energy: Power for a Sustainable Future*. Oxford University Press.
- Kothari, D.P. & Singal, K.C. *Renewable Energy Sources and Emerging Technologies*. PHI Learning.

Reference Books

- Government of India Reports, MNRE – Renewable Energy for Rural and Agricultural Development.
- FAO – Digital Agriculture and Smart Energy Systems.
- Recent research papers and case studies on IoT-enabled renewable energy systems.

Digital Agribusiness Management (MS656)

(PEC 3 Credits 2-0-2-0)

Objective

To equip students with knowledge and skills required for planning, formulating, implementing, and evaluating agribusiness projects with integrated digital and analytical tools.

Course Outcomes

Students will be able to

- understand project lifecycle, costing, and budgeting in agribusiness.
- apply PRA/RRA, feasibility studies, and structured planning tools.
- implement monitoring, evaluation, and performance assessment systems.
- integrate GIS, IoT, data analytics, AI, and blockchain in project management.
- develop sustainable and technologically enabled agribusiness project proposals.

Introduction to Agribusiness Project Management

Concept and characteristics of projects; stages of project lifecycle; planning principles; cost estimation and budgeting; project design frameworks; elements of viable agribusiness project planning.

Project Formulation and Planning Tools

PRA and RRA methodologies; logical framework approach; feasibility assessment including financial, technical, and market analysis; risk assessment techniques; structured project formulation and proposal development.

Project Implementation, Monitoring, and Evaluation

Implementation processes and workflows; monitoring indicators and dashboard-based tracking; performance measurement techniques; documentation and reporting; mid-term review, impact assessment, and structured project closure procedures.

Digital and Technological Tools in Project Management

ICT and MIS platforms for project administration; GIS-based spatial decision tools; IoT systems for real-time monitoring; data analytics and AI-based forecasting models; blockchain-enabled financial tracking and traceability systems for transparent execution.

Strategic and Sustainable Agribusiness Project Design

Public-private partnership models; sustainability assessment frameworks; climate-risk mitigation and inclusive development strategies; circular economy approaches; innovation-led planning for scalable and long-term agribusiness projects.

Text Books

- Gido & Clements — *Project Management*
- PMI — *Project Management Body of Knowledge (PMBOK)*

Reference Books

- Chandra — *Projects: Planning, Analysis, Selection, Financing, Implementation*
- FAO — *Manuals on Agricultural Project Planning*
- World Bank — *Project Design and Monitoring & Evaluation Guides*

Farm Equipment Management (MS657)

(PEC 3 Credits 2-0-2-0)

Objective

To enable students to understand mechanisms, testing, economics, sustainability, and emerging digital technologies in agricultural machinery systems.

Course Outcomes

Students will be able to

- understand working principles and selection criteria of farm machinery.
- evaluate machinery performance using modern testing tools.
- apply AI, IoT, and automation for equipment optimization.
- assess economic and sustainability impacts of mechanization.

Fundamentals of Farm Machinery and Mechanization

Mechanization trends: global and Indian perspectives. Classification & working principles of major farm equipment: tillage, planting, irrigation, harvesting, post-harvest. Power sources: tractors, power tillers, electric drives, renewable-powered machines. attaching equipment to operations; field capacity & efficiency. Technology Add-on: Smart power units, electric tractors.

Testing and Evaluation of Agricultural Equipment

Testing protocols: BIS, ICAR, OECD standards. Performance testing: draft, slip, power requirement, fuel efficiency. Material testing of critical components. Technology Add-on: IoT sensors, GPS, data loggers for testing. Digital evaluation: simulators, digital twin-based testing.

Machinery Economics and Management

Equipment selection, replacement & fleet management strategies. Cost of operation: depreciation, fuel, labour, maintenance. Break-even, payback period, life-cycle cost analysis. Digital tools: Excel/MATLAB/farm apps for economic analysis. AI & Data Analytics: Predictive maintenance & operational optimization.

Maintenance, Safety & Ergonomics

Preventive, predictive, and corrective maintenance. Troubleshooting: mechanical, electrical, hydraulic systems. Operator safety & HMI-based ergonomic design. Technology Add-ons: IoT-enabled predictive maintenance, Wearable safety sensors, AR-assisted repair and training

Emerging Technologies in Agricultural Equipment

Precision agriculture: GNSS/GPS, GIS, VRT. Drones & UAVs for spraying, mapping, crop monitoring. Automation & robotics in planting, weeding & harvesting. Smart irrigation: IoT pumps & soil moisture sensors. AI/ML in machinery scheduling & data analytics. Blockchain for service logs & equipment tracking. Cloud computing & mobile apps for equipment management. Global & Indian smart mechanization case studies.

Sustainable Mechanization

Energy-efficient machinery operation & eco-design. Solar-powered & battery-based tools. Waste & residue management from machinery. Circular economy: reuse, recycling & remanufacturing. Carbon & environmental impact assessment of mechanization.

Practical / Laboratory / Field Work

- Identification & testing of farm machinery.
- Field capacity measurement using GPS tools.
- Cost & performance analysis of selected machinery.
- Condition monitoring using IoT-based sensors.
- Virtual farm simulation tools: FARMSIM/MATLAB/SimFarm.
- Demonstration of drones & robotic systems.
- Visit to smart farms & national machinery testing centres.

Suggested Software & Tools

- FarmMachSim, SolidWorks, AutoCAD, MATLAB/Simulink.
- IoT platforms: Arduino, Raspberry Pi, Node-RED.
- Data tools: Excel, Python, Power BI, R.

Text Books

- Srivastava, A.C. – *Principles of Farm Machinery*.
- Hunt, D. – *Farm Power and Machinery Management*.
- Mehta et al. – *Testing and Evaluation of Agricultural Machinery*.
- FAO Manuals on Sustainable Agricultural Mechanization.
- Journals: *Precision Agriculture*, *Biosystems Engineering*, *Journal of Agricultural Engineering*.

IoT-Enabled Agribusiness Supply (MS658)

(PEC 3 Credits 2-0-2-0)

Objective

To provide students with knowledge of production systems, supply chain coordination, logistics, and digital technologies—including IoT—for improving efficiency, transparency, and sustainability in agribusiness.

Course Outcomes

Students will be able to

- Analyze production systems and supply chain structures in agribusiness.
- Apply IoT, sensors, and digital tools for real-time monitoring and traceability.
- Design logistics and cold chain solutions for perishables.
- Evaluate sustainability, performance metrics, and analytical decision models.

Introduction to Agribusiness Production Systems

Concepts and scope of production management; characteristics of agricultural production (seasonality, perishability, uncertainty); types of production systems (contract farming, cooperatives, food processing, agri-input manufacturing); productivity measures, optimization, and quality control; farm management software, sensors, and IoT-based monitoring.

Supply Chain Management in Agribusiness

Structure and functions of agricultural supply chains; models for commodity value chains; role of producers, aggregators, processors, wholesalers, retailers; demand forecasting, procurement, and distribution; ERP and cloud-based SCM tools.

IoT and Digital Technologies in Agribusiness SCM

Sensor-based monitoring (temperature, humidity, soil conditions); real-time tracking and traceability using IoT and GPS; blockchain for transparency and food safety; AI/ML for logistics optimization and demand prediction; case studies in dairy, horticulture, and fisheries.

Logistics, Storage, and Cold Chain Management

Transportation planning and challenges; storage systems for grains and perishables; cold chain infrastructure design and operation; packaging, labeling, grading; IoT-enabled cold storage and automated environmental control systems.

Supply Chain Analytics and Decision-Making

KPIs and benchmarking; cost and efficiency analysis; analytics using Excel, Python, Power BI, Tableau; decision models for sourcing, inventory, and distribution under uncertainty; simulation and optimization (CPM, PERT, linear programming).

Sustainable and Resilient Agribusiness Supply Chains

Sustainability concerns and food loss reduction; ethical sourcing and fair-trade certification; digital platforms for farmer–market linkage; government initiatives and FPO-led models; IoT and blockchain for sustainable value chains.

Practical / Field Work

- Supply chain analysis for a selected commodity.
- IoT-based temperature and humidity monitoring in logistics.
- Industry visits (processing units, cold storage, logistics hubs).
- Hands-on digital SCM software (SAP, Agri ERP, Tally).
- Case study presentations.
- Mini-project: Design a technology-enabled supply chain model.

Suggested Software & Tools

ERP: SAP, Oracle SCM Cloud, Agri ERP

IoT Platforms: Arduino, Raspberry Pi, AWS IoT Core

Analytics Tools: Excel, Python, Power BI, Tableau

Blockchain: Hyperledger Fabric, Ethereum

AgriTech Platforms: CropIn, Stellapps, DeHaat, Ninjacart

Text Books

- Chopra, S. & Meindl, P. — *Supply Chain Management: Strategy, Planning, and Operation*.
- Bozarth, C. & Handfield, R. — *Introduction to Operations and Supply Chain Management*.
- Acharya, S.S. & Agarwal, N.L. — *Agricultural Marketing in India*.
- FAO — *Digital Agriculture and Smart Supply Chains*.
- Research papers on IoT-enabled agribusiness systems.

Horticultural Production Management (MS659)

(PEC 3 Credits 2-0-2-0)

Objective

To develop scientific knowledge and practical skills in horticultural crop production, post-harvest handling, and integration of modern technologies for enhanced quality, value addition, and market competitiveness.

Course Outcomes

Students will be able to

- understand scientific production practices for fruits, vegetables, and flowers.
- apply nursery management, propagation, and protected cultivation techniques.
- manage post-harvest operations including storage, packaging, transport, and value addition.
- use IoT, drones, AI, and digital platforms in horticultural systems.
- analyse horticulture supply chains to improve quality, efficiency, and market performance.

Principles of Horticultural Production

Basics of horticulture; plant propagation and nursery practices; soil and climate requirements; production of quality planting materials; growth regulation; resource-efficient production systems for enhanced productivity.

Commercial Horticultural Production Systems

Cultivation practices for fruits, vegetables, and flowers; protected cultivation including polyhouses and net-houses; hydroponics and vertical farming; resource management, profitability analysis, and export-oriented planning.

Landscape and Ornamental Horticulture

Principles of landscape design; garden layout and urban green space planning; selection and management of ornamental species; lawn establishment; aesthetic and ecological functions of ornamental horticulture.

Post-Harvest Management and Value Addition

Harvesting indices and maturity standards; packaging materials and handling systems; cold storage, transport logistics, and ripening technologies; processing, dehydration, canning, and value-added product development; strategies to reduce post-harvest losses.

Technological Innovations in Horticulture

Precision horticulture using GIS and drones; IoT-enabled greenhouses and environmental control; AI-based grading and sorting; RFID-based tracking and cold chain monitoring; digital platforms and decision support systems for market linkage.

Text Books

- Chadha – *Handbook of Horticulture*
- Singh – *Production Technology of Vegetables and Flowers*

Reference Books

- Kader – *Postharvest Technology of Horticultural Crops*
- FAO Manuals on Cold Chain and Post-Harvest Management
- ICAR–IIHR Publications

Smart Agribusiness Policies (MS660)

(PEC 3 Credits 2-0-2-0)

Objective

To familiarise students with agribusiness systems, regulatory frameworks, and the application of modern technologies, enabling strategic and sustainable decision-making in agricultural enterprises.

Course Outcomes

Students will be able to

- Understand agribusiness concepts, policies, legal frameworks, and governance.
- Analyse marketing, pricing, and trade policies affecting agribusiness.
- Apply IoT, blockchain, AI, and digital platforms in agribusiness decision-making.
- Evaluate sustainable and climate-smart agribusiness models.
- develop entrepreneurial and strategic solutions for emerging agribusiness challenges.

Foundations of Agribusiness Management

Scope and structure of agribusiness; sector linkages; evolution of agribusiness models; entrepreneurship and startup ecosystem; role of cooperatives, FPOs, and agribusiness firms; ethical and sustainable management practices.

Agribusiness Policies and Regulatory Framework

Agricultural marketing and pricing policies; MSP mechanisms; APMC Acts and reforms; eNAM and digital market integration; trade policies affecting domestic and global agribusiness; policy frameworks influencing agricultural value chains.

Agricultural Business Laws and Compliance

Food safety and quality regulations; packaging, grading, and certification standards; legal requirements for agribusiness operations; export–import laws; contract farming and legal compliance frameworks; regulatory institutions and enforcement.

Digital Technologies in Agribusiness

ICT and DSS platforms in agriculture; precision farming technologies; IoT sensors for monitoring operations; blockchain for traceability and transparency; drones for crop mapping and logistics; AI-driven analytics for forecasting, pricing, and supply chain decisions.

Sustainable and Future-Ready Agribusiness Models

Renewable energy integration in agricultural operations; climate-smart practices; circular economy frameworks and waste valorisation; digital finance and agrifintech systems; resilience strategies for climate and market risks; models for inclusive and green agribusiness.

Text Books

- Acharya & Agarwal — *Agricultural Marketing in India*
- Kotler & Keller — *Marketing Management*

Reference Books

- NITI Aayog & NABARD Reports on FPOs
- FAO — *Digital Agriculture Guidelines*
- Government reports on agricultural policy frameworks and legal compliance