University of Kalyani

Department of Business Administration

Master of Business Administration (MBA)

Integrated Two Academic Sessions Four Semester Course: NEP-2020 based Curriculum Framework (With effect from 2026-27 Academic Session)

Eligibility: Undergraduate Degree (3-year UG or 4-year UG) or its equivalent (B.E., B. Tech., BBA, BCA etc.) from the University of Kalyani or from any recognized University**.**

Intake: Fifty-two (52) [May change from time to time based on University notification]

Academic Calendar: As per the University Academic calendar.

Admission procedure: As per the University notification.

Course Structure:

- MBA programme is in the **Level 6.5** of NHEQF-2023 and follows NCrF-2023 and UGC-C&CFPP-2024.
- MBA curriculum consists of **88 credits** distributed in **28 courses** in **2 academic sessions** and **4 semesters.**
- Each student is required to complete a total of **88 credits** from this curriculum, including **3 credits** Value-Added Course (VAC) based on Indian Knowledge System.
- **36 credits** are meant for **Programme Core Courses, 18 credits** for **discipline-specific Elective** courses, **6 credits** for **Ability-enhancement** course, **9 credits** for **Skill-enhancement** course, **3 credits** for **value-added courses based on** IKS, **8 credits** for Summer Internship and **4 credits** for guided research project and **4 credits** for Grand Viva.

- **Programme Electives (PEs)**- Students pick a **Single Core Specialization** from the elective baskets. The Department will offer four core specialisations as Major course viz. Finance, HR, Marketing and Information Systems & Technology. For each specialisation, there will be two baskets, Basket A for the 3rd Semester and Basket B for the 4th Semester consisting of **5 papers** in each basket. The students should choose **three papers** (3) from each Basket in consultation with the Department.

- PGBOS in Business Administration may determine **related/equivalent online courses** (SWAYAM/NPTEL/e-PG-Pathshala, etc.) and a total of 20% of the credits of the programme (particularly VAC and SEC courses) may be earned by a student in virtual learning mode.
- Continuous Assessment marks of a course are either **Continuous Evaluation (CE)** and/or **Practical (PRC)** and/or **Project** or a **combination.** The practical component will be evaluated through a practical examination at the end of the Semester. Project papers are to be considered as sessional papers.

- **Programme Outcomes (POs):**

  - **PO1: Managerial Competence:** Apply knowledge of management theories and practices to solve business problems.
  - **PO2: Critical Thinking & Analytical Ability:** Foster analytical and critical thinking abilities for data-driven decision-making.
  - **PO3: Value-Based Leadership:** Ability to develop leadership skills with a strong ethical and social grounding.
  - **PO4: Global Perspective:** Understand business environments globally and adapt to complex legal and economic systems.
  - **PO5: Communication & Teamwork:** Enhance effective communication and collaborative skills in corporate environments.

- **Exit option:** A student exiting after Year 1 (completing Semester I & II, earning 42 credits) receives a **Post Graduate Diploma in Business Administration (PGDBA)**.

Sem	Course Code	Course Title	Course Type	Credit Pattern			Credit Value	Marks Distribution		
				Lecture (L)	Tutorial (T)	Practical (P)		Summative assessment	Continuous assessment	Total Marks
SEM I	MBA-PC-101	Principles of Management & Organisational Behaviour	PC	2	1	0	3	70	30	100
	MBA-PC-102	Quantitative Methods for Decision Making	PC	2	1	0	3	70	30	100
	MBA-PC-103	Managerial Economics	PC	2	1	0	3	70	30	100
	MBA-PC-104	Accounting for Managers	PC	2	1	0	3	70	30	100
	MBA-AEC-105	Business Analytics and Management Information Systems	AEC	1	0	2	3	50	50 (Practical)	100
	MBA-SEC-106	Business Communication & Corporate Etiquette	SEC	1	0	2	3	50	50 (Practical)	100
	MBA-VAC-107	Business & Society (IKS Framework)	VAC	2	1	0	3	70	30	100
							21			
Sem	**Course Code**	**Course Title**	**Course Type**	**Credit Pattern**			**Credit Value**	**Marks Distribution**		
				Lecture (L)	**Tutorial (T)**	**Practical (P)**		**Summative assessment**	**Continuous assessment**	**Total Marks**
SEM II	MBA-PC-201	Marketing Management	PC	2	1	0	3	70	30	100
	MBA-PC-202	Financial Management	PC	2	1	0	3	70	30	100
	MBA-PC-203	Human Resource Management	PC	2	1	0	3	70	30	100
	MBA-PC-204	Production & Operations Management	PC	2	1	0	3	70	30	100
	MBA-PC-205	Research Methodology	PC	2	1	0	3	70	30	100
	MBA-PC-206	Artificial Intelligence & Machine Learning	PC	1	0	2	3	50	50 (Practical)	100
	MBA-SEC-207	Management Science	SEC	1	0	2	3	70	30	100
							21			
Sem	**Course Code**	**Course Title**	**Course Type**	**Credit Pattern**			**Credit Value**	**Marks Distribution**		
				Lecture (L)	**Tutorial (T)**	**Practical (P)**		**Summative**	**Continuous assessment**	**Total Marks**

								assessment		
SEM III	MBA-PC-301	Corporate Governance & Business Laws	PC	2	1	0	3	70	30	100
	MBA-SEC-302	Entrepreneurship & New Venture Creation	SEC	2	1	0	3	70	30	100
	MBA-PE-F/H/M/IST	Elective 1 (Basket A - Major Course 1)	PE	2	1	0	3	70	30	100
	MBA-PE-F/H/M/IST	Elective 2 (Basket A - Major Course 2)	PE	2	1	0	3	70	30	100
	MBA-PE-F/H/M/IST	Elective 3 (Basket A - Major Course 3)	PE	2	1	0	3	70	30	100
	MBA-PROJ-306	Summer Internship Project (Report)	Project	1	3	0	4	0	100(Project)	100
	MBA-PROJ-307	Summer Internship Project (Viva)	Project	0	0	0	4	0	100(Project)	100
							23			

Sem	Course Code	Course Title	Course Type	Credit Pattern			Credit Value	Marks Distribution		
				Lecture (L)	Tutorial (T)	Practical (P)		Summative assessment	Continuous assessment	Total Marks
SEM IV	MBA-PC-401	Strategic Management	PC	2	1	0	3	70	30	100
	MBA-PE-F/H/M/IST	Elective 4 (Basket B - Major Course 4)	PE	2	1	0	3	70	30	100
	MBA-PE-F/H/M/IST	Elective 5 (Basket B - Major Course 5)	PE	2	1	0	3	70	30	100
	MBA-PE-F/H/M/IST	Elective 6 (Basket B – Major Course 6)	PE	2	1	0	3	70	30	100
	MBA-AEC-405	Professional Communication & Employability Skill	AEC	1	0	2	3	50	50 (Practical)	100
	MBA-PROJ-406	Research Project	Project	1	3	0	4	0	100(Project)	100
	MBA-PROJ-407	Grand Viva	Project	0	0	0	4	0	100(Project)	100
							23			

- Elective papers are to be chosen from any of the four areas of Specialization: Finance, Marketing, HR and Information Systems And Technology. Students should select 3 papers from Basket A in Semester III and 3 papers from Basket B in Semester IV. Students will be allowed to take specialization based on their academic performances, and feasibility of the department.

Basket A (Finance)	**Basket A (Marketing)**	**Basket A (H.R.)**	**Basket A (Information Systems & Technology)**
F – 1 = Corporate Financial Reporting F – 2 = Financial Statement Analysis F – 3 = Indian Taxation Laws F – 4 = Financial Services F – 5 = Investment Analysis & Portfolio Management	M – 1 = Consumer Behavior M – 2 = Sales and Distribution Management M – 3 = Brand Management M – 4 = Integrated Marketing Communication M – 5 = Financial Services Marketing	HR-1 = Human Resource Planning HR-2=Human Resource Development HR 3 = Performance Management and Competency Management HR–4 = Compensation Management HR–5 = Industrial Relations	IST –1 = System Analysis and Design IST – 2 = Database Management Systems IST– 3 = Data Mining in Business Decision IST – 4 = Business Forecasting and Time Series Analysis. IST-5 = Cyber Security
Basket B (Finance)	**Basket B (Marketing)**	**Basket B (H.R.)**	**Basket B (Information Systems & Technology)**
F – 6 = Management Control Systems F – 7 = Strategic Financial Management F – 8 = International Financial Management F – 9 = Business Valuation F – 10 = Financial Derivatives	M – 6 = Retail Marketing M – 7= Service Marketing M – 8 = Industrial Marketing M – 9 = Global Marketing M – 10 = Rural Marketing	HR–6 =Labor Legislations HR 7 =Strategic Human Resource Management HR 8 = Organizational Change and Development HR-9 = International Human Resource Management HR-10 =Training and Development	IST –6 = E-commerce and Digital Markets Analytics IST – 7 = Advanced Data Science IST – 8 = Business Intelligence and Decision Support System IST – 9 = Multivariate Data Analysis IST-10: Deep Learning and Neural Network

Course Credit Structure

Credit Distribution – 88 Credits

<table>
<tr><td colspan="2">Programmed Core(PC) courses – 36 credits</td><td colspan="3">Major (Elec) [PE] + SEC+AEC courses – 18 + 9 + 6 = 33 credits</td></tr>
<tr><td rowspan="2">Theory</td><td rowspan="2">Practical</td><td colspan="2">SEC & AEC (Mandatory)</td><td>Programme Electives – 18 Credits</td></tr>
<tr><td>Theory</td><td>Practical</td><td></td></tr>
<tr><td>Courses: 11
Credits: 33</td><td>Courses: 1
Credits: 3</td><td>Courses: 2
Credits: 6</td><td>Courses: 3
Credits: 9</td><td>Courses: 6
Credits: 18</td></tr>
<tr><td colspan="2">Total : 12 courses and 36 credits</td><td colspan="2">Total: 5 courses and 15 credits</td><td>Total: 6 courses and 18 credits</td></tr>
</table>

<table>
<tr><td>Indian Knowledge System – 3 credits
(IKS)</td><td>Summer Internship – 8 credits
Research Project & Grand Viva – 8 credits</td></tr>
<tr><td>Course: 1
Credits: 3</td><td>Course: 4
Credits: 16</td></tr>
<tr><td>Total : 1 course and 3 credits</td><td>Total : 4 courses and 16 credits</td></tr>
</table>

MBA-PC- 101: PRINCIPLES OF MANAGEMENT & ORGANISATIONAL BEHAVIOUR

Credit: **3**
Total Allotted Hours: **45 [30-15-0]***

Pre-requisite(s): *None*

Objective
The basic purpose of this course is to introduce students to the fundamental frameworks of management alongside the psychological and sociological dynamics that govern human behavior within modern workplaces.

Course Outcomes (COs)
Upon successful completion of this course, students will be able to:

- **CO1:** Deconstruct classical, behavioral, and contemporary management schools of thought to resolve modern administrative and operational challenges.
- **CO2:** Assess individual behavioral variables—including personality profiles, perceptual biases, and motivational drivers—to optimise employee engagement.
- **CO3:** Formulate strategic interventions to manage group dynamics, corporate conflicts, structural power politics, and leadership transitions.
- **CO4:** Design agile organisational cultures and systematic change management frameworks that reduce employee resistance during corporate scaling.

Course Contents

Module-1

The Paradigm of Management: Definition, nature, scope, and universal importance of management; Managerial roles (Mintzberg's matrix) and core skill tiers (technical, human, conceptual). Productivity, Efficiency and Effectiveness. **[3-2-0]***

Module-2

Evolution of Management Thought: Classical School: Scientific Management (Taylor), Administrative Theory (Fayol), Bureaucracy (Weber).Neo-Classical School: Hawthorne Studies and the Human Relations Movement (Elton Mayo).Modern Frameworks: Systems approach, Contingency theory, and McKinsey's 7S model. Business Excellence Approach, Organizational Learning Approach. **[6-3-0]***

Module-3

Organization Structure & Core Functions Organization Structure, Formal and Informal organizations, Departmentation, Line and Staff, Span of Management, Centralization and Decentralization, Authority and Power, Delegation. Management by Objectives, Planning lifecycle, Structural decision-making steps under bounded rationality models **[5-3-0]***

Module-4

Introduction & Individual Behaviour Foundations & Psychological Dynamics : Concept and understanding of OB. Models of Organisational Behaviour, OB Processes; Personality & Values**:** Determinants of personality; Big Five Model, Myers-Briggs Type Indicator (MBTI) application in team building; Core workplace values and person-organisation fit. Job satisfaction. **[6-1-0]***

Module-5

Motivation Frameworks & Workplace Engagement-Understanding human needs, Need deprivation, McGregor, Maslow, Herzberg, Alderfer, Vroom, McClelland's Theories, Content and Process theories of Motivation, Applied Motivation Strategy**:** Job design models, Job Characteristics Model (JCM), job rotation, enrichment, enlargement, flexible working blueprints, and financial vs. non-financial rewards architectures. Motivation and Productivity **[5-3-0]***

Module-6

Group Behaviour Matrix: Defining and classifying groups; Stages of group development (Tuckman's 5-stage model); Group properties: roles, norms, status metrics, size dynamics, and cohesiveness. organisational conflict and conflict resolution, organisational culture;

Teams vs. Groups **:** Cross-functional and virtual teams. Leadership Evolution: Trait theories; Behavioural frameworks (Ohio State, Michigan studies, Managerial Grid); Contingency models (Fiedler's model, Situational Leadership, Path-Goal theory); Contemporary leadership: Transformational, transactional, authentic, and ethical leadership styles. Uncertainty and Leadership. **[5-3-0]***

***L-T-P**

Programme Outcomes, Course Outcomes (COs) and Modules Mapping

Sl.	Programme Outcomes	Course Outcomes	Modules
1.	PO1 & PO3	CO1	MI
2.	PO1, PO3 & PO4	CO1	M2
3.	PO1 & PO3	CO1	M3
4.	PO1 & PO3	CO1 & CO2	M4
5.	PO1 & PO3	CO1, CO2 & CO3	M5
6.	PO1 & PO3	CO1, CO3 & CO4	M6

Suggested Readings

1. Koonz, H and Weichrich, H. Management, 10th ed., New York, McGraw Hill.
2. Robbins, S.P. Management, 5th ed., New Jersey, Englewood Cliffs, Prentice Hall Inc.
3. Stoner, J *et.al*. Management. 6th, New Delhi, Prentice Hall of India.
4. Robbins, S.P. Judge, T.A. and Sanghi, S. "Organizational Behaviour", 12th Ed, Pearson Prentice Hall, New Delhi.
5. Newstrom, J.W. and Davis, K. "Organizational Behaviour: Human Behaviour at Work", 11th Ed, Tata McGraw Hill, New Delhi.
6. Luthans, Fred, "Organizational Behaviour", 11th Edition, McGraw Hill International Edition, New York.
7. Aswathappa, K "Organizational Behaviour, 6th Ed, Himalaya Publishing House, Mumbai.
8. Pareek, Udai, "Understanding Organizational Behaviour", 2nd Edition, OxfordUniversity Press, New Delhi

9. French, W.L. & Bell, C.H. “Organizational Development - Behavioural Science Interventions for Organization Improvement, 6th Ed, Prentice Hall of India, New Delhi.
10. Khandwalla, P N “Organisation Design for Excellence”, Tata-McGraw Hill, New Delhi, 1992

The list of cases and specific references including recent articles and reports will be announced in the class at the time of launching of the course.

MBA-PC- 102: QUANTITATIVE METHODS FOR DECISION MAKING

Credit: **3**
Total Allotted Hours: **45 [30-15-0] ***

Pre-requisite(s): *Basic knowledge in mathematics.*

Objectives
The objective of this paper is to make the students familiar with basic statistical techniques. The main focus, however, is in their applications in business decision-making.

Course Outcomes (COs)
Upon successful completion of this course, students will be able to:

- **CO1:** Awareness on the various types of business data & related measures.
- **CO2:** Prepare, read, and interpret tables, charts & graphs involving statistical data.
- **CO3:** Explore advanced computational procedures in business statistics.
- **CO4:** Apply business statistics for problem solving & managerial decision-making.

Course Contents

Module-1

Data & Information - Time Series, Cross Section & Panel data- Primary data Vs. Secondary data - Real time data Vs. Historical data- Nominal data, Ordinal data, Interval data & Ratio data. Discrete data Vs. Continuous data, Ungrouped and Grouped data, Univariate data & Bivariate data. **[5-0-0]***

Module-2

Frequency Distribution of data– Central Tendency- Descriptive Statistics- Correlation- Use of Software for Descriptive Statistics & Correlation. **[5-5-0]***

Module-3

Curve fitting -Regression Equation- Least Square Method **[5-5-0]***

Module-4

Population & Sample - Types of sampling- Probability Distribution of data- - Determination of sample size for inferential statistics- Confidence Interval & Testing of Hypothesis**.[5-5-0]***

Module-5

Selection of proper inferential tools in Empirical Analysis- Chi-Squared test, one sample t tests, independent sample t test, paired sample t test, Use of software for Empirical Analysis**.[10-0-0]***

***L-T-P**

Programme Outcomes, Course Outcomes(COs) and Modules Mapping

Sl.	Programme Outcomes	Course Outcomes	Modules
1.	PO1, PO2 & PO5	CO1	MI
2.	PO1, PO3 & PO4	CO2 & CO3	M2
3.	PO1 & PO2	CO2 & CO3	M3
4.	PO1, PO2 & PO4	CO2, CO3 & CO4	M4
5.	PO1, PO2, PO3, PO4 & PO5	CO2, CO3 & CO4	M5

Suggested Readings

1. Allen B. Downey, Think Stats: Probability and Statistics for Programmers, O’Reilly Media Inc.
2. Steven Roman , Writing Excel Macros with VBA 2e , O′Reilly.
3. N.G.Das, Statistical Methods, M.Das& CO., Kolkata.
4. Chandha, N.K. Statistics for Behavioral and Social Scientists, Reliance Publishing House, Delhi.
5. Gupta, S.P and Gupta M.P. Business Statistics, Sultan Chand, New Delhi.
6. Levin, R.I and Rubin, D.S. Statistics for Business Management, , Prentice Hall Inc., New Jersey.

The list of cases and specific references including recent articles and reports will be announced in the class at the time of launching of the course.

MBA-PC-103 : MANAGERIAL ECONOMICS

Credit: **3**
Total Allotted Hours: **45 [30-15-0]***

Pre-requisite(s): *Basic knowledge of geometry*

Objective
This course is aimed to gain knowledge of the basic economic terms and concepts so that students can understand the scenario of usage of the various concepts of economics and know the application of various micro and macro-economic variables to solve business problems.

Course Outcomes (COs)
Upon successful completion of this course, students will be able to:
- **CO1:** Understand fundamental microeconomic concepts (demand, supply, and elasticity) to analyze consumer and market behaviours.
- **CO2:** Comprehend the theory of production, understanding the relationship between inputs and outputs, and how the combination of factors influences production along with various costs in relation to production decisions levels.
- **CO4:** Gain a comprehensive understanding of various market structures and pricing practices, enabling them to analyze market behavior, firm strategies, and pricing decisions in different economic contexts.
- **CO5:** Analyze macroeconomic variables to assess the external business environment and adapt corporate strategies.

Course Contents

Module-1

Theory of Demand and Supply: Nature and Scope of Managerial Economics; Micro and Macro-Economics; Positive versus Normative Economics;. The market forces of supply and demand; Market demand versus individual demand; Demand schedule and demand curve; Determinants of demand/demand function;; Law of demand; Concept of Supply. Expansion & contraction; Increase & decrease in Demand and Supply, Supply and Demand-equilibrium, Elasticity and its application: The elasticity of demand; Types of Elasticity of Demand; Using Elasticity in Managerial Decision Making. Indifference Curve approach and Consumer’s Equilibrium. **[8-4-0]***

Module-2

Theory of Production: Factors of production; Theory of production; Production function; Short run and long run production function; Law of variable proportion; Returns to scale. Isoquant and Iso-cost line; Optimal factor combinations**.**

Theory of Cost: Short run and Long run cost; various measures of cost- FC, VC, AC, MC; Cost curves & their shapes **[6-3-0]***

Module-3

Markets and their equilibrium: Market Structure and Pricing Practices: Perfect competition, its characteristics; Short run and Long run equilibrium of a perfectly competitive firm, Monopoly, its characteristics; Short run and Long run equilibrium under monopoly; Price Discrimination by a monopolist, Monopolistic competition, its Characteristics; Individual equilibrium and Group equilibrium, Oligopoly and its features. **[10-5-0]***

Module-4

Macroeconomic Environment: National income: concept, GDP and GNP and measurements. Consumption Function, Business cycles and Inflation management: concepts, types, causes, impacts and remedies. Balance of Payments. **[6-3-0]***

*L-T-P

Programme Outcomes, Course Outcomes (COs) and Modules Mapping

Sl.	Programme Outcomes	Course Outcomes	Modules
1.	PO1, PO2 & PO3	CO1	MI
2.	PO1, PO3 & PO4	CO2 & CO3	M2
3.	PO1 , PO2, PO3 & PO4	CO1 & CO3	M3
4.	PO1, PO4 & PO5	CO4	M4

Suggested Readings

1. Ahuja, H.L., Managerial economics (9th ed.). New Delhi: S.Chand, 2020
2. Campbell R. McConnell, Stanley L. Brue, Sean Masaki Flynn. Economics (22nd ed.) New Delhi: McGraw Hill. 2022
3. Greenlaw,S &Taylor,M. Principles of Microeconomics. (2nd ed.) OpenStax.2022
4. Mankiw, G. Principles of Economics (8th ed.). New Delhi: Cengage Learning. 2021
5. Paul A. Samuelson, Sudip Chaudhuri, Anindya Sen, William D. Nordhaus, Economics (20th ed.).: McGraw Hill. 2021
6. Thomas,C.R & Maurice, C.S. Managerial Economics (12th ed.). New Delhi: McGraw Hill. 2021

The list of cases and specific references including recent articles and reports will be announced in the class at the time of launching of the course.

MBA-PC- 104: ACCOUNTING FOR MANAGERS

Credit: **3**
Total Allotted Hours: **45 [30-15-0]***

Pre-requisite(s): *Basic computer knowledge, including file handling and internet browsing.*

Objective
The basic purpose of this course is to develop an insight of postulates, principles and techniques of accounting and utilization of financial and accounting information for planning, decision-making and control.

Course Outcomes (COs)
Upon successful completion of this course, students will be able to:

- **CO1:** Understand and apply the fundamental concepts, principles, and conventions of financial accounting.
- **CO2:** Prepare, read, and interpret corporate financial statements (Balance Sheet, P&L, Cash Flow).
- **CO3:** Execute advanced financial statement analysis using ratios to evaluate company performance.
- **CO4:** Apply cost accounting tools, including marginal costing and relevant costing, for managerial decision-making.

Course Contents

Module-1
Financial Accounting: Introduction to Accounting: Users of accounting information, internal vs. external reporting. Generally Accepted Accounting Principles- Overview of International Financial Reporting Standards (IFRS) and Ind AS (Indian Accounting Standards). The Accounting Cycle: Mechanics of Double-entry system, Journalizing, Ledger Posting, and Trial Balance. Preparation of Financial Statements with special reference to analysis of a Balance Sheet and Measurement of Business Income, Inventory Valuation, Accounting of depreciation, Financial Statement Analysis Tools of Financial Analysis, Ratio Analysis**:** Liquidity, Solvency, Profitability, Turnover, and Valuation Ratios (DuPont Analysis framework)
[12-6-0]*

Module-2
Cost Accounting: Cost classification, Cost behaviour, Cost classification, Cost centers, and Cost sheet preparation, Overhead Costs and Control, Job Costing. Activity based costing.
[8-4-0]*

Module-3
Management Accounting: Concept, Need, Importance and Scope, Budget and Budgetary Control, Marginal costing: Concept, C-V-P Analysis, Relevant Costing (Basic Concepts).
[10-5-0]*

***L-T-P**

Programme Outcomes, Course Outcomes(COs) and Modules Mapping

Sl.	Programme Outcomes	Course Outcomes	Modules
1.	PO1, PO2 & PO4	CO1, CO2 &CO3	MI
2.	PO1 &PO2	CO4	M2
3.	PO1 &PO2	CO4	M3

Suggested Readings

1. Bhattachayya, Ashish, Financial Accounting For Business Managers, PHI, New Delhi.
2. Narayanaswamy,R., Financial Accounting: A Managerial Perspective, Prentice Hall of India,NewDelhi.
3. N. Ramachandran & Ram Kumar Kakani, Accounting for Management, McGraw Hill Publication
4. Horngren,Datar & Foster, Cost Accounting, Pearson Education
5. Horngren,Sundem, & Stratton, Introduction to Management Accounting, PHI.

The list of cases and specific references including recent articles and reports will be announced in the class at the time of launching of the course.

MBA-AEC - 105: BUSINESS ANALYTICS AND MANAGEMENT INFORMATION SYSTEMS

Credit: **3**
Total Allotted Hours: **45 [15-0-30] ***

Pre-requisite(s): *Basic computer knowledge*

Objective

The basic purpose of this course is to introduce the structural landscape of data-driven decision-making and to transform raw data through cleaning and preprocessing, designing exploratory visual dashboards, building logical problem-solving workflows using algorithmic flowcharts.

Course Outcomes (COs)

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

- **CO1:** Describe the scope of business analytics and outline the ethical boundaries, data security parameters, and governance frameworks of corporate data.
- **CO2:** Execute data preprocessing pipelines, including extraction, transformation, cleaning, and integration, to ensure data quality.
- **CO3:** Design logical programming architectures using structured algorithms, flowchart symbols, and pseudo-code blocks to map business problems.
- **CO4:** Create multiple versions of digital visualizations using Excel, R and Power BI.

Course Contents

Module-1

Basics of MIS & DSS: Organizations: Processing of Inputs to Outputs, Impact of Information Technology in Management Decision Making, IS and Business Strategy, Value Chain Model (Porter, 1985), 5 Forces Model (Porter, 1985), Core Competency, Competitive Edge, **MIS:** Tiered needs for information, MIS, DSS, EIS. **[4-0-4]***

Module-2

Managerial Decision Making: Decision making processes and people, Decision Support System, Decision Making vs. Problem Solving, Structured, Unstructured and semi - structured problems, programmable and non-programmable decisions, Bounded Rationality, Simon's Model. **[3-0-4]***

Module-3

Database, Data Warehousing, Data Mining: Database Management Systems: concepts, design, Structured, semi-structured, and unstructured data streams, Normalization, SQL programming. Data Warehousing: Concepts. Data Mining: Concepts, Knowledge Management concept. **[5-0-3]***

Module-4

Introduction to Business Analytics: Foundations of Analytics**:** Definition, history, and scope of Business Analytics; the analytics continuum: Descriptive, Diagnostic, Predictive, and Prescriptive paradigms. Data-Driven Culture**:** The structural importance of data-driven decision-making vs. intuitive management; **[3-0-4]***

Module-5

Lab Segment:

Basic MS Excel, R, Power BI, Data Visualization Principles & Techniques: Fundamentals of Data Visualization, Dashboard design & best practices, Visualization techniques. **[0-0-15]***

***L-T-P**

Programme Outcomes, Course Outcomes(COs) and Modules Mapping

Sl.	Programme Outcomes	Course Outcomes	Modules
1.	PO1& PO2	CO1	MI
2.	PO1&PO2	CO2	M2
3.	PO1 &PO2	CO3	M3
4.	PO1&PO2	CO2 & CO3	M4
5.	PO1&PO2	CO3 & CO4	M5

Suggested Readings

1. Madhu S, Swapna HR – Business Analytics - I, Himalaya Publication House, 2024 Edition
2. Haydn Thomas – Demonoid – Business Analysis Fundamentals – Pearson Education – 2015 Revised Edition
3. Business Analytics, 2ed: The Science of Data-Driven Decision Making by U. Dinesh Kumar

The list of cases and specific references including recent articles and reports will be announced in the class at the time of launching of the course.

MBA-SEC - 106: BUSINESS COMMUNICATION & CORPORATE ETIQUETTE

Credit: **3**
Total Allotted Hours: **45 [15-0-30] ***

Pre-requisite(s): *A basic understanding of English language skills (reading, writing, speaking, and listening*

Objective
The basic purpose of this course is to develop advanced professional communicative competence and behavioural alignment required in modern global corporate settings.
Course Outcomes (COs)

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

- **CO1:** Design clear, concise, and persuasive written business artifacts (emails, executive summaries, proposals) that match intended strategic objectives.
- **CO2:** Deliver highly structured oral presentations using professional data storytelling, appropriate kinetic gestures, and audience management techniques.
- **CO3:** Apply standard rules of international corporate etiquette—including business dining protocols, cross-cultural dressing codes, and executive presence markers.
- **CO4:** Model constructive behaviour in digital and remote workspaces by implementing professional email etiquette, collaborative chat decorum, and virtual meeting guidelines.

Course Contents

Module 1
Foundations of Communication Skills: Communication process and the importance of effective communication. Verbal, non-verbal, and paralinguistic communication. Active listening skills and barriers to listening. Body language and clarity in speaking. Principles of structured speaking and persuasive communication. Kinesics & Vocalics**:** Mastering non-verbal cues (eye contact matrices, open posture gestures); Managing vocalics (pitch variation, intentional pausing, and pacing modulation) Structuring presentations and managing presentation anxiety and stage presence**. [6-0-10]***

Module 2
Foundations of Corporate Communication & Strategic Writing: The Corporate Communication Loop: Flow of internal communication (downward, upward, horizontal, grapevine dynamics); Identifying and mitigating psychological, physical, and semantic communication barriers. The 7 Cs of Business Communication: Clear, Concise, Concrete, Correct, Considerate, Complete, and Courteous frameworks applied to written copy.
Strategic Written Artifacts: Drafting high-impact corporate emails; Structuring executive summaries, business proposals, and internal memoranda; Delivering good, bad and neutral news; Writing under crisis situations (delivering negative news or sensitive internal announcements)**.[6-0-6]***

Module 3
Executive Presence, Appearance & Social Etiquette: Decoding Corporate Grooming: Understanding business formal, semi-formal, smart-casual, and casual dress codes for regional

and international cross-cultural workspaces. The First Impression Matrix: Professional greeting codes, handshake mechanics, exchange of business cards, and introducing stakeholders across varying organizational hierarchies. **[3-0-4]***

Module 4

Digital Workspace Decorum & Netiquette : Virtual Meeting Management: Best practices for video conferencing tools (lighting, background choices, muting algorithms); Professional camera placement and virtual engagement triggers. Asynchronous Communication Protocols: Email netiquette rules (subject lines, out-of-office notifications, appropriate cc/bcc placement); Managing professional real-time corporate messaging tools (Slack/Teams loops) without digital fatigue. Professional Social Media footprint: Building and curating a professional brand profile on professional networking platforms (LinkedIn); Online thought leadership vs. corporate confidentiality risks**. [0-0-10]***

***L-T-P**

Programme Outcomes, Course Outcomes (COs) and Modules Mapping

Sl.	Programme Outcomes	Course Outcomes	Modules
1.	PO1 & PO5	CO1 & CO2	MI
2.	PO1 & PO5	CO1 & CO2	M2
3.	PO1 & PO5	CO3	M3
4.	PO1 & PO5	CO4	M4

Suggested Readings

1. Murphy, Herta A and Peck, Charles E. Effective Business Communications. McGraw Hill, New Delhi.
2. Pearce, C Glenn etc., Business Communications: Principles and Applications. John Wiley, New York.
3. Mitra, Barun K. Personality Development and Soft Skills. Oxford University Press, 2011
4. Raymond V. Lesikar, Marie E. Flatley, Kathryn Rentz, and Paula Lentz; Adapted by Neerja Pande, Lesikar's Business Communication: Connecting in a Digital World, McGraw Hill Education, New Delhi.
5. Shital Kakkar Mehra , Business Etiquette: A Guide for the Indian Professionals, Harper Collins

The list of cases and specific references including recent articles and reports will be announced in the class at the time of launching of the course.

MBA-VAC- 107: BUSINESS & SOCIETY (IKS Framework)

Credit: **3**
Total Allotted Hours: **30 [30-15-0] ***

Pre-requisite(s): *None*

Objective
The basic purpose of the course is to impart a basic understanding about the complex interplay between corporate activities, local communities, and the broader social fabric. Also to equip the students to apply historical and modern environmental frameworks to corporate sustainability challenges.

Course Outcomes (COs)
Upon successful completion of this course, students will be able to:

- **CO1:** Evaluate the evolutionary shift from purely capitalistic shareholder models to Indian stakeholder and *Lokasangraha* (universal public good) models.
- **CO2:** Apply *Isavasyam* (ecological custody) frameworks to evaluate modern ESG commitments and climate-conscious business actions.
- **CO3:** Analyze the socio-economic impacts of corporate lobbying, technological disruption, and algorithmic bias on consumer privacy and marginal societies.
- **CO4:** Formulate sustainable Corporate Social Responsibility (CSR) models based on modern legal guidelines and old ethical philosophies.

Course Contents

Module-1
The Changing Interface of Business and Society: Historical evolution of the relationship between commerce and community. Organization Theory; Western Shareholder Primacy vs. Modern Multi-Stakeholder Capitalism. The IKS framework of **Lokasangraha** (public welfare and social cohesion) and **Sarvodaya** (the rise of all). Selected Pieces from Kautilya's Arthashastra **[12-8-0] ***

Module-2
Business, Ecology, and Ancient Custodianship : The Climate crisis and corporate extractivism: Deconstructing the limits to economic growth. The Vedantic concept of **Isavasyam** (Everything belongs to nature; enjoy wealth with a spirit of renunciation/custodianship). **Prakriti** (Nature) as a living stakeholder rather than a passive resource sink. Evaluating the modern corporate ESG (Environmental, Social, Governance) dashboard through a circular economic prism. **[10-5-0] ***

Module-3
Power, Ethics, and the Digital Citizen: Concept of Business Ethics and Perspectives, Corporate political influence, institutional capture, and the ethics of public lobbying. The Surveillance Economy: Consumer manipulation, digital profiling, and algorithmic threats to societal well-being. Combating corporate malpractices: Product safety liabilities, false marketing, and the role of civic consumer movements. Whistleblowing as a moral duty aligned with **Satya** (Truth) and **Nyaya** (Justice**) [8-2-0] ***

Programme Outcomes, Course Outcomes(COs) and Modules Mapping

Sl.	Programme Outcomes	Course Outcomes	Modules
1.	PO1, PO2 & PO3	CO1	MI
2.	PO1, PO2 & PO3	CO2 &CO4	M2
3.	PO1, PO2 & PO3	CO3 &CO4	M3

Suggested Readings

1. Business and Society: Stakeholders, Ethics, Public Policy – Anne T. Lawrence and James Weber (McGraw Hill).
2. Indian Knowledge Systems: Structural Foundations – Kapil Kapoor (DK Printworld).
3. Alternative Economic Survey, India – Alternative Survey Group (Daanish Books).
4. Small is Beautiful: Economics as if People Mattered – E.F. Schumacher.
5. Ministry of Corporate Affairs (MCA), India: National Voluntary Guidelines on Social, Environmental and Economic Responsibilities of Business.
6. Selected historical readings on ancient Indian mercantile networks from R.C. Majumdar's Corporate Life in Ancient India.

The list of cases and specific references including recent articles and reports will be announced in the class at the time of launching of the course.

MBA-PC-201: MARKETING MANAGEMENT

Credit: **3**
Total Allotted Hours:**45 [30-15-0] ***

Pre-requisite(s): *None*

Objective: This course aims to familiarize students with the marketing function in organizations. The course is intended to consider the key principles and activities crucial for the role that marketing has in an organization.

Course Outcomes (COs)
Upon successful completion of this course, students will be able to:

- **CO1:** Understand fundamental marketing concepts, theories and principles; the role of marketing in the organization context.
- **CO2:** Recognize various elements marketing mix for effective functioning of an organization.
- **CO3:** Critically analyze an organization's marketing strategies.
- **CO4:** Learn appropriate tools and techniques of marketing.
- **CO5:** Evaluate marketing implementation strategies and formulate and assess strategic, operational and tactical marketing decisions.

Course Contents

Module-1
Understanding Marketing Management and Marketing Environment: Nature and Scope of Marketing, Basic Concepts, Corporate orientations towards the marketplace. 4Ps and 4Cs of Marketing. - Market segmentation, targeting and positioning. Micro and Macro Environment, Components and their impacts on business decision making. **[6-3-0]***

Module-2
Understanding Consumer and Industrial markets: Difference between Consumer and Industrial Markets, Factors influencing buying behaviour, Buying Decision Process and Stages, buying roles, Types of buying behaviour; Organizational Buying and its Participants. Models of Consumer Buying Behaviour. . **[6-3-0]***

Module-3
Product decisions: Product: concept, types, levels. Product mix, Product Life Cycle**,** New product development, Branding and Packaging decisions, Product Adaptation. Services**:** Features, Service mix**.** **[6-3-0]***

Module-4
Pricing: Pricing Objectives, Methods and Strategies.

Promotion Decisions: Promotion mix- Advertising, Sales promotion and Personal Selling.

Channel Management – Types of intermediaries, Types of distribution channels, Factors affecting Channel Decision**. [6 - 3- 0]***

Module-5

Emerging Horizons of Marketing: Holistic Marketing, Experiential marketing, Influencer marketing, Guerrilla marketing, Managing digital communication: Concepts, Strategies and implementation **[6-3-0] ***

***L-T-P**

Programme Outcomes, Course Outcomes (COs) and Modules Mapping

Sl.	Programme Outcomes	Course Outcomes	Modules
1.	PO1,PO2 & PO4	CO1, CO2 & CO4	MI
2.	PO1, PO2 & PO3	CO3 & CO4	M2
3.	PO1 , PO2, PO3	CO3, CO4 &CO5	M3
4.	PO1, PO3 & PO5	CO4 &CO5	M4
5	PO1 , PO4 & PO5	CO1, CO3 & CO5	M5

Suggested Readings

1. Kotler, Philip and Armstrong, G. Principles of Marketing. New Delhi, Prentice Hall of India.
2. Ramaswamy, V S and Namakumari, S. Marketing Management: Planning, Control. New Delhi, MacMillan.
3. Stanton, William, J. Fundamentals of Marketing. New York, McGraw Hill.
4. Saxena, R. Marketing Management. 6th Edition, New Delhi. McGraw Hill
5. Neelamegham, S. Marketing in India: Cases and Readings. New Delhi, Vikas.
6. Govindarajan, Marketing Management: Concepts, Cases, Challenges and Trends, New Delhi. Prentice Hall of India.

The list of cases and specific references including recent articles and reports will be announced in the class at the time of launching of the course.

MBA-PC- 202: FINANCIAL MANAGEMENT

Credit: **3**
Total Allotted Hours: **45 [30-15-0] ***

Pre-requisite(s): *Financial Accounting & Analysis (1st Semester)*

Objectives
The objective of this paper is to provide a comprehensive introduction to the principles and practices of financial management in a modern business enterprise. It focuses on how financial managers maximize shareholder wealth through key corporate decisions: investment (capital budgeting), financing (capital structure), and dividend policy, alongside working capital management.

Course Outcomes (COs)
Upon successful completion of this course, students will be able to:

- **CO 1:** Understand the core concepts of financial management, the time value of money, and the objective of wealth maximization.
- **CO 2:** Evaluate and select long-term investment projects using capital budgeting techniques.
- **CO 3:** Analyse the cost of capital and design an optimal capital structure utilizing financial leverage.
- **CO 4:** Formulate effective dividend policies based on corporate theories and market dynamics.
- **CO 5:** Assess and manage short-term working capital requirements to ensure organisational liquidity and efficiency.

Course Contents
Module-1
Introduction to Financial Management: Meaning, scope, and objectives (Profit Maximisation vs. Wealth Maximisation); Functions of a Financial Manager: Investment, Financing, and Dividend decisions; Time Value of Money (TVM): Future Value and Present Value of a single cash flow, annuity, and perpetuity. Sources of Finance: Long-term and Short-term**.[7-3-0] ***

Module-2
Cost of Capital: Specific cost of debt, preference shares, equity, and retained earnings. Weighted Average Cost of Capital (WACC) and Marginal Cost of Capital- Role of Cost of Capital. Capital Structure Theories: Net Income (NI) approach, Net Operating Income (NOI) approach, Traditional approach, and Modigliani-Miller (MM) hypothesis. Leverage Analysis: Operating Leverage, Financial Leverage, and Combined Leverage; EBIT-EPS analysis**.[6-4-0] ***

Module-3
Capital Budgeting Process: Importance, difficulties, and rationale. Evaluation Techniques (Non-Discounted): Payback Period, Accounting Rate of Return (ARR).Evaluation Techniques (Discounted): Net Present Value (NPV), Internal Rate of Return (IRR), Profitability Index (PI).

Advanced Topics: NPV vs. IRR conflict, Capital Rationing, and Risk analysis in Capital Budgeting**.[6-4-0]***

Module-4

Concepts of Working Capital: Gross vs. Net Working Capital, Operating Cycle concept, and forecasting working capital requirements. Other Components of Working Capital Management: Inventory Management, Receivables Management and Cash Management**.[5-2-0]***

Module-5:

Dividend Policy: Concept, types of dividends, and factors influencing dividend policy. Dividend Theories: Relevance Theories (Walter's Model, Gordon's Model) and Irrelevance Theory (Modigliani-Miller Hypothesis).Bonus Shares & Stock Splits: Theoretical frameworks and practical implications**.[6-2-0]***

***L-T-P**

Programme Outcomes, Course Outcomes (COs) and Modules Mapping

Sl.	Programme Outcomes	Course Outcomes	Modules
1.	PO1, PO2, PO4 & PO5	CO1	MI
2.	PO1, PO2 & PO4	CO1 & CO3	M2
3.	PO1, PO2 & PO4	CO1 & CO2	M3
4.	PO1, PO2 & PO4	CO1 & CO5	M4
5.	PO1, PO2 & PO4	CO1 & CO4	M5

Suggested Readings

1. Prasanna Chandra, Financial Management: Theory and Practice, McGraw Hill Education.
2. I.M. Pandey, Financial Management, Vikas Publishing House.
3. Khan, M.Y. & Jain, P.K., Financial Management: Text, Problems and Cases, Tata McGraw Hill.
4. James C. Van Horne & John M. Wachowicz, Fundamentals of Financial Management, Prentice Hall.
5. Richard A. Brealey, Stewart C. Myers, Franklin Allen, & Pitabas Mohanty, Principles of Corporate Finance, McGraw Hill.

The list of cases and specific references including recent articles and reports will be announced in the class at the time of launching of the course.

MBA-PC-203: HUMAN RESOURCE MANAGEMENT

Credit: 3
Total Allotted Hours: 45 **[30-15-0] ***

Pre-requisite (s): *Principles of Management & Organisational Behaviour (Semester I)*

Objectives
The objective of this course is to provide a comprehensive understanding of the principles, practices, and strategic role of Human Resource Management (HRM) in the contemporary organizations. The course will develop the ability of the students' to align the HR strategies with business goals through effective workforce planning, talent acquisition, employee development, performance management, compensation, and employee relations. It also familiarizes learners with emerging HR trends such as HR analytics, digital HR, diversity and inclusion, sustainability, and global HR practices.

Course Outcomes (COs)
Upon successful completion of this course, students will be able to:

- **CO1:** Explain the concepts, functions, evolution, and strategic significance of Human Resource Management in modern organizations.
- **CO2:** Apply HR planning, job analysis, recruitment, selection, and talent acquisition techniques to address organizational workforce requirements.
- **CO3:** Analyse and design employee training, learning and development, career planning, and performance management systems for enhancing organizational effectiveness.
- **CO4:** Evaluate compensation systems, employee engagement practices, industrial relations mechanisms, and labour law frameworks for ethical and sustainable HR decisions.
- **CO5:** Assess contemporary HR challenges and opportunities related to HR analytics, digital transformation, diversity and inclusion, sustainability, and global human resource management.

Course Contents
Module–1
Foundations of Human Resource Management: Evolution, nature and scope of HRM; Personnel Management versus Human Resource Management; objectives and functions of HRM; Strategic Human Resource Management (SHRM); HRM and organizational effectiveness; changing role of HR managers; HR ethics and corporate social responsibility; Human Resource policies; HR challenges in the era of digital transformation and AI. **[7-2-0]***

Module–2
Human Resource Planning and Talent Acquisition: Human Resource Planning: objectives, process, forecasting HR demand and supply; Job Analysis, Job Description and Job Specification; Job Design and Job Evaluation; Recruitment: sources and methods; Selection Process: tests, interviews, assessment centres and psychometric tools; Placement, induction and onboarding; Employer branding and talent acquisition strategies. **[6-3-0]***

Module–3

Human Resource Development and Performance Management: Concept of HRD. Objectives and importance of HRD in contemporary organizations. HRD method-training and non-training method. Training and Development: need assessment, methods and evaluation; Learning and Development (L&D) initiatives; Management Development Programmes; Non training methods of HRD: Career Planning and Succession Planning; Coaching and Mentoring. Performance Management System (PMS); Methods of Performance Appraisal; Competency Mapping; 360-degree Feedback; Performance Counselling. Job design. Quality circle. Suggestion schemes **[6-4-0]***

Module–4

Compensation Management and Employee Relations: Compensation Management: objectives and components; Wage and Salary Administration; Incentives, Benefits and Employee Welfare; Job Evaluation and Pay Structures; Employee Engagement and Quality of Work Life (QWL); Industrial Relations: concepts and approaches; Grievance Handling and Discipline Management; Collective Bargaining; Overview of Labour Legislations and Social Security provisions relevant to HR managers. **[5-3-0]***

Module–5

Contemporary and Global Issues in HRM: HR Analytics and HR Information Systems (HRIS); Digital HR and Artificial Intelligence in HR; Diversity, Equity and Inclusion (DEI); Work-Life Balance and Employee Well-being; Green HRM and Sustainable HR Practices; Managing Remote and Hybrid Workforce; International Human Resource Management (IHRM); Cross-cultural Management; Future of Work and Emerging Trends in HRM. **[6-3-0]***

***L-T-P**

Programme Outcomes (POs), Course Outcomes (COs) and Modules Mapping

Sl.	Programme Outcomes	Course Outcomes	Modules
1	PO1, PO3, PO5	CO1	M1
2	PO1, PO2 & PO5	CO1 & CO2	M2
3	PO1, PO2, PO3 & PO5	CO2 & CO3	M3
4	PO1, PO2 & PO3	CO3 & CO4	M4
5	PO1, PO2, PO3 & PO4	CO4 & CO5	M5

Suggested Readings

1. Dessler, Gary. Human Resource Management, Pearson Education.
2. Aswathappa, K. Human Resource Management: Text and Cases, McGraw Hill Education.
3. Noe, Raymond A., Hollenbeck, John R., Gerhart, Barry & Wright, Patrick M. Fundamentals of Human Resource Management, McGraw Hill.
4. Mathis, Robert L., Jackson, John H. & Valentine, Sean R. Human Resource Management, Cengage Learning.
5. Gomez-Mejia, Luis R., Balkin, David B. & Cardy, Robert L. Managing Human Resources, Pearson.
6. Mello, Jeffrey A. Strategic Human Resource Management, Cengage Learning.
7. Armstrong, Michael & Taylor, Stephen. Armstrong's Handbook of Human Resource Management Practice, Kogan Page.
8. Ivancevich, John M. Human Resource Management, McGraw Hill.
9. Monappa, Arun & Saiyadain, Mirza S. Personnel Management, Tata McGraw Hill.
10. Rao, T. V. Human Resource Development: Experiences, Interventions, Strategies, Sage Publications.

The list of cases and specific references including recent articles and reports will be announced in the class at the time of launching of the course.

MBA-PC-204: PRODUCTION & OPERATIONS MANAGEMENT
Credit: **3**
Total Allotted Hours: **45 [30-15-0]***

Pre-requisite(s): Basic knowledge in Elementary Mathematics,
Objectives
To get a systems view of production &operations, to understand and develop a framework for managing production and operations.

Course Outcomes (COs)
Upon successful completion of this course, students will be able to:

- **CO1:** To facilitate Objective Solutions in Business Decision Making
- **CO2:** To be able to design new simple models, like: CPM, CRAFT to improve decision–making
- **CO3:** Explore the various practical issues for practicing values.
- **CO4:** To do proper analysis in forms the judgment of the ultimate decision-maker
- **CO5:** To Learn application in Business decision process and Management.

Course Contents

Module -1
Production Vs. Operations Management: Production Vs. Operations, Management Issues, Parameters for performance Evaluations. Just-In-Time, Batch Processing, Continuous Production, Job shop production. **[4-2-0]***

Module -2
Location Selection & Layout: Location Selection, Factors for location decisions, Decision making using quantitative methods, Brown and Gibson's Method, Multi plant location analysis.
Layout, Product Layout, Process Layout, CRAFT, Factors responsible for layout design, Parameters to evaluate a Layout. **[8-4-0]***

Module -3
Networking: Networking techniques for Project Management, PERT and CPM techniques, Activity on arrow, Activity on Node, Total Floats, Project Appraisal Methods. **[4-2-0]***

Module -4
Inventory Management: Inventory Management, Cost associated with Inventory, EOQ, Reorder Point, Lead time, Safety stock, EOQ with Price Break, EOQ under inflation, Q-system Vs. P-System, gradually replenished EOQ, ABC analysis. Importance of Purchasing, Vendor Rating, FOB & CIF, Forward Buying, Aggregate Planning, Line Balancing, Production Scheduling, Sequencing or Prioritization, Maintenance, Preventive Vs. Breakdown Maintenance, Reliability. **[8-4-0]***

Module -5
Quality Control& Time Study, Statistical Quality Control, Acceptance Sampling, Multiple Sampling Procedures, Evolution and milestones of Quality movement, TQM. Method study & Time Study, Ergonomics, Overview work measurement techniques. **[6-3-0]***
***L-T-P**

Programme Outcomes, Course Outcomes (COs) and Modules Mapping

Sl.	Programme Outcomes	Course Outcomes	Modules
1.	PO1, PO2, PO3 & PO5	CO1	MI
2.	PO2, PO3 & PO4	CO2 , CO4 & CO5	M2
3.	PO1 & PO4	CO1 & CO3	M3
4.	PO2 & PO3	CO1, CO3 & CO4	M4
5.	PO2, PO3 & PO5	CO2 & CO3	M5

Suggested Readings

1. Adam, E E& Ebert, RJ. Production and Operations Management. 6th ed., New Delhi, Prentice Hall of India.
2. Amrine Harold T. etc. Manufacturing Organisation and Management. Englewood Cliffs, New Jersey, Prentice Hall Inc.
3. Buffa, E. S. Modern Production Management. New York, John Wiley.
4. Chary, S. N. Production and Operations Management. New Delhi, Tata McGraw Hill.
5. Dobler, Donald W and Lee, Lamar. Purchasing and Materials Management. New York, McGraw Hill.

The list of cases and specific references including recent articles and reports will be announced in the class at the time of launching of the course.

MBA-PC-205 : RESEARCH METHODOLOGY
Credit: **3**
Total Allotted Hours: **45 [30-15-0] ***

Pre-requisite(s): *Basic knowledge in statistics.*

Objectives
To equip the students with the concepts for carrying out empirical research and to provide an insight into the application of modern analytical tools and techniques in the context of managerial decision-making.

Course Outcomes (COs)
Upon successful completion of this course, students will be able to:

- **CO1:** Formulate valid research problems and identify relevant literature gaps.
- **CO2:** Design appropriate quantitative or qualitative research methodologies.
- **CO3:** Apply statistical tools and data analysis techniques to research data.
- **CO4:** Interpret findings accurately and write scientific reports adhering to ethical standards

Course Contents

Module-1
Introduction to Research Methodology: Concepts of Research- Various types of research, Steps in conducting Empirical Research, Statement of Research Objectives- Review of Literature- Identification of Research Gap- Formulation of Research Hypothesis. Errors in research. Exploratory and Conclusive research. Experimentation. Features of good research design. Contents of Research report**. [8 -2-0]***

Module-2
Data Collection: Primary vs. Secondary data. Methods of collecting primary data – Observation vs Survey method. Concept of Measurement and Scale, Types of Scales. Criteria of good measurement Scale. Rank order scale, Paired Comparison Scale, Thurston's scale, Constant Sum scale, Graphic Rating Scale, Likert scale, Semantic differential scale, Stapel scale. Reliability and Validity. Questionnaire: Definition, Importance and Types of questionnaire. Process of questionnaire designing**. [10-3-0]***

Module-3
Hypothesis Testing: Concepts of Hypothesis testing and inferential statistics; Type-I & Type-II errors; p-value; robustness & power of a test**. [4-3-0]***

Module-4
Parametric test Vs. Non-parametric test: Various types of t tests & their non-parametric equivalents. Various types of ANOVA and their non-parametric equivalents. **[4-3-0]***

Module-5
Applications of Statistical Methodologies in Research: Multivariate Techniques; Non-linear Techniques; Qualitative Techniques. **[4-4-0]***
***L-T-P**

Programme Outcomes, Course Outcomes(COs) and Modules Mapping

Sl.	Programme Outcomes	Course Outcomes	Modules
1.	PO1, PO2 & PO5	CO1	MI
2.	PO1, PO3 & PO5	CO2 & CO4	M2
3.	PO1 & PO4	CO1 & CO3	M3
4.	PO1 & PO5	CO1, CO3 & CO4	M4
5.	PO1, PO2, PO3, PO4 & PO5	CO1, CO2, CO3 & CO4	M5

Suggested Readings

1. Kothari, C.R:.Research Methodology: Methods and Techniques, WishwaPrakashan.
2. Bennet, Roger: Management Research, ILO, 1983.
3. Golden, -Biddle, Koren and Karen D. Locke: Composing Qualitative Research, Sage pub.
4. Salkind, Neil j., Exploring Research, 3rd ed., Prentice-Hall, NJ.
5. Jhonson and Wicherin Applied Multivariate Analysis, New Age International

The list of cases and specific references including recent articles and reports will be announced in the class at the time of launching of the course.

MBA-PC-206: ARTIFICIAL INTELLIGENCE & MACHINE LEARNING
Credit: **3**
Total Allotted Hours: **45 [15-0-30]***

Pre-requisite(s): *Basic knowledge in AI & ML*

Objectives
To understand the basic concepts of AI and its use as optimization technique. To understand different search strategies and Resolution in AI. To understand classification and clustering methodology. To understand Deep Learning Paradigms.

Course Outcomes (COs)
Upon successful completion of this course, students will be able to:

- **CO1:** To understand the basic concepts of AI and its use.
- **CO2:** Differentiate between the components of AI and Machine Learning.
- **CO3:** To understand classification and clustering methodology.
- **CO4:** Explain Matrix Factorization and different Deep Learning Techniques.

Course Contents

Module-1
Introduction to Artificial Intelligence (AI), Machine Learning (ML), and Deep Learning (DL): Definitions, AI vs. ML vs. DL, Role of AI/ML/DL in Business: Use cases in marketing, finance, HR, and operations. **AI Agents:** Design, Functionality, Limitations, Examples. Different types of AI Environment, Introduction to State Space with example. **[4-0-8]** *

Module-2
Uniformed search strategies: Breadth first search, Depth First Search and their completeness, optimality, complexity and suitable environment to use. **[3-0-6]** *

Module-3
Performance Evaluation metric: Mean Squared Error, R-Squared, Precision, Recall, F1 Score, Cross Validation, Selecting appropriate evaluation metric. **[3-0-6]***

Module-4
Introduction to Unsupervised Learning, Types of clusters, Clustering Algorithm: K-means clustering, Hierarchical clustering, Density based clustering. Case studies like Customer Segmentation, Fraud detection, Market Basket Analysis etc. **[3-0-6]***

Module-5
Introduction to Artificial Neural Networks, Neurons, Activation functions, Feed forward Neural Network, Structure and workflow. **[2-0-4]***

***L-T-P**

Programme Outcomes, Course Outcomes (COs) and Modules Mapping

Sl.	Programme Outcomes	Course Outcomes	Modules
1.	PO1, PO2, PO3 & PO5	CO1	MI
2.	PO2, PO3 & PO4	CO2 & CO4	M2
3.	PO1 & PO4	CO1 & CO3	M3
4.	PO2 & PO3	CO1, CO3 & CO4	M4
5.	PO2, PO3 & PO5	CO2 & CO3	M5

Suggested Readings

1. Artificial Intelligence- Ritch &Knight TMH
2. Machine Learning – Tom Mitchell
3. Deep Learning with Python Paperback- François Chollet (Author)
4. Pattern Recognition & Machine Learning – C.M. Bishop (Springer)

The list of cases and specific references including recent articles and reports will be announced in the class at the time of launching of the course.

MBA-SEC-207: MANAGEMENT SCIENCE

Credit: **3**
Total Allotted Hours: **45 [30-15-0]***

Pre-requisite(s): *Basic knowledge in mathematics.*

Objectives
The objective of this paper is to make the students familiar with basic optimization techniques. The main focus, however, is in their applications in business decision-making.
Course Outcomes (COs)
Upon successful completion of this course, students will be able to:
- **CO1:** Awareness on the various types of business data & related optimization issues.
- **CO2:** Study the nature of optimizations and the types of solutions.
- **CO3:** Explore advanced computational procedures in optimization.
- **CO4:** Apply optimization in managerial decision-making.

Course Contents

Module-1
Decision Science : Linear Programming problems Vs. Non-Linear Programming problems in Business Management, Integer programming problems and other special cases in Business Decision making**. [5-0-0]***

Module-2
Mathematical Formulation: Modelling & Nature of Solutions & Solution Algorithms.
[5-5-0] *

Module-3
Classical Models: Transportation Problem, Assignment Problem, Travelling Salesman Problem. **[10-5-0]***

Module-4
Queuing Theory: Basic concepts, Types of Queuing Models, Applications in Business Decisions. **[5-5-0]***

Module-5
Game Theory: Basic concepts, Applications in Business Management**. [5-0-0]***

***L-T-P**

Programme Outcomes, Course Outcomes(COs) and Modules Mapping

Sl.	**Programme Outcomes**	**Course Outcomes**	**Modules**
1.	PO2 & PO5	CO1	MI
2.	PO1, PO2 & PO4	CO2 & CO4	M2
3.	PO1 & PO2	CO2 & CO3	M3
4.	PO1, PO2 & PO4	CO2, CO3 & CO4	M4
5.	PO1, PO2, PO3, PO4 & PO5	CO3 & CO4	M5

Suggested Readings

1. Gould, F.J. etc. Introduction to Management Science. Englewood Cliffs, New Jersey, Prentice Hall Inc.
2. Taha, H.A. Operation Research – An Introduction. New York, Mc-Millan.
3. R. S. Barr, R.V. Helgason, Jeffrey L. Kennington, Interfaces in Computer Science and Operations Research: Advances in Metaheuristics, Optimization, and Stochastic Modeling Technologies: 7 (Operations Research/Computer Science Interfaces Series) , Springer
4. Sharma, JK,Operations Research: Theory and Application. New Delhi, McMillian India Ltd.
5. K. Aardal, George L. Nemhauser, R. Weismantel, Handbooks in Operations Research and Management Science: Discrete Optimization: Volume 12 , North Holland.
6. Chakraborty&Ghosh, Linear Programming & Game Theory , M/S Moulik Library- Kolkata, India.

The list of cases and specific references including recent articles and reports will be announced in the class at the time of launching of the course.

MBA-PC- 301: CORPORATE GOVERNANCE & BUSINESS LAWS

Credit: **3**
Total Allotted Hours: **45 [30-15-0]***

Pre-requisite(s): *Basic understanding of business environments.*

Objectives

The objective of this course is to assist the students in understanding basic laws affecting the operations of a business enterprise. The main focus, however, is in their applications in corporate management and managerial decision making.

Course Outcomes (COs)

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

- **CO1:** Understand the foundational concepts of law, its societal relevance, and mercantile enforceability.
- **CO2:** Analyze and apply the essential elements, execution strategies, and remedies of business contracts.
- **CO3:** Evaluate the regulations, commercial liabilities, and discharge of various negotiable financial instruments.
- **CO4:** Implement commercial legal safeguards regarding conditions, warranties, and unpaid seller rights.
- **CO5:** Comprehend regulatory pathways for corporate formation, management duties, financial structures, and winding up procedures.
- **CO6:** Comprehend the evolution and regulatory development process of corporate governance
- **CO7:** Analyze the role of Board of Directors and the Management in implement Corporate Governance related Regulations

Course Contents

Module-1
Concept of Law Society: State and Law, Enforceability of Law, Mercantile Law. **[3-0-0]***

Module-2
Indian Contract Act, 1872: Contract defined, Elements of valid contract, Classification of contracts, Offer and acceptance, Consideration, Capacity of contracts, Free consent, Legality of object and consideration, Illegal agreements, Termination of contracts, Breach of contract, Indemnity and guarantee, Quasi Contracts. **[5-3-0]***

Module-3
Negotiable Instruments Act, 1881: Definition and characteristics of different types of negotiable instruments, Parties to a negotiable instrument and their capacity, Dishonour of cheques – Civil & Criminal liabilities, Discharge from Liability, Crossing of cheques, Bank drafts and Banker's cheques – Negotiation & Assignment, Holder in Due Course**.[4-2-0]***

Module- 4

Sale of Goods Act, 1930: Classification of goods, Conditions & Warranties, Passing of ownership rights, Rights of an unpaid seller, Remedies for breach of Contract of Sale of Goods.**[3-1-0]***

Module-5

Companies Act, 2013: Nature and kinds of companies, Formation, Memorandum, Articles, Prospectus, Capital – Shares, debentures, minimum subscription Management & Meeting, Audit & Accounts, Appointment of Directors Power of Directors, borrowing powers; Winding up of companies.**[4-2-0]***

Module -6

Evolution of Corporate governance; Theories of Corporate Governance -Stakeholders' theory and Stewardship theory, Agency theory, Separation of ownership and control; Corporate Governance Mechanism- Anglo-American Model, German Model, Japanese Model, Indian Model; OECD Principles; SOX Act 2002.SEBI Committees- K M Birla Committee (1999), Narayan Murthy Committee (2003); Clause 49 of Listing Agreement, MCA Committees- Naresh Chandra Committee, Dr. J JIrani Committee. Corporate Governance provisions in the Companies Act 2013. **[5-3-0]***

Module -7

Roles and Responsibility of Board of Directors- LODR- The duties and responsibilities of Directors; Role of Independent Directors; Role of Chairman; Role of CEO; Separation of Chairman and CEO posts; Committees of the Board- Audit Committee, Remuneration Committee, Nomination Committee; Management Audit- Risk Evaluation and Risk Management, Evaluation of key financial decisions and disclosures; Corporate Governance & Performance.**[6-4-0]***

***L-T-P**

Programme Outcomes, Course Outcomes(COs) and Modules Mapping

Sl.	**Programme Outcomes**	**Course Outcomes**	**Modules**
1.	PO1, PO2 & PO5	CO1	MI
2.	PO1, PO3 & PO4	CO2 & CO3	M2
3.	PO1 & PO2	CO2 & CO3	M3
4.	PO1, PO2 & PO4	CO2, CO3 & CO4	M4
5.	PO1, PO2 & PO4	CO2, CO3 & CO4	M5
6.	PO1, PO2, PO3, PO4 & PO5	CO1 & CO 6	M6
7.	PO1, PO2, PO3, PO4 & PO5	CO1 & CO 7	M7

Suggested Readings

1. Singh, Avtar, Company Law. 11 th ed. Lucknow, Eastern.
2. Ramaiya, A., Guide to the Companies Act. Nagpur, Wadhwa.
3. Shah. S M. Lectures on Company Law. Bombay, N.M.Tripathi.
4. Tuteja. S K, Business Law For Managers New Delhi. Sultan Chand.
5. C. Fernando,Corporate Governance: Principles, Policies and Practices, Pearson
6. Chris A. Mallin, Corporate Governance, Oxford
7. C. V. Baxi, Corporate governance: Critical IssuesExcel Books, 2007 Bob Tricker, Robert Ian Tricker,
8. Corporate Governance: Principles, Policies and Practices OUP Oxford, 2012

The list of cases and specific references including recent articles and reports will be announced in the class at the time of launching of the course.

MBA-SEC-302: ENTREPRENEURSHIP & NEW VENTURE CREATION
Credit: **3**
Total Allotted Hours: **45 [30-15-0] ***

Pre-requisite(s): *Basic understanding of organization and business process.*

Objectives
The objective of this course is to expose the student to the growth of entrepreneurship in developing countries with special reference to India. To develop and strengthen entrepreneurial quality and motivation in students.

Course Outcomes (COs)
Upon successful completion of this course, students will be able to:

- **CO1:** Gain knowledge and skills needed to run a business
- **CO2:** Write business plan on their own.
- **CO3:** Understand the operations of incubation centers and start-ups.
- **CO4:** Understand the government policies and regulations

Course Contents

Module-1
Entrepreneurial traits, types and significance; Definitions, characteristics of Entrepreneurship. **[4-2-0] ***

Module-2
Entrepreneurial types, Qualities and functions of entrepreneurs, Role and importance of entrepreneur in economic growth. **[4-2-0] ***

Module-3
Competing theories of entrepreneurship; Entrepreneurial development programme in India. Managing Entrepreneurial Talent, Design Thinking & Creative Process. **[4-2-0] ***

Module-4
Target group, selection of centre, pre-training work; Govt. Policy towards Start-ups; Incubation Centric. Entrepreneurial Input; Entrepreneurial Behaviours and Entrepreneurial motivation - Achievement and management success, Entrepreneurial success in rural area. **[8-4-0] ***

Module-5
Innovation and entrepreneur; Establishing Entrepreneurs system, Search for business idea, sources of ideas, idea processing, input requirements: Sources and criteria of financing, fixed and working capital assessment; Technical assistance, marketing assistance, Development of Project, Proof of Concept, Feasibility Reports, Legal formalities of New venture, Documentation. Measuring and Managing Strategic performance of ventures. [**10-5-0]***

***L-T-P**

Programme Outcomes, Course Outcomes(COs) and Modules Mapping

Sl.	Programme Outcomes	Course Outcomes	Modules
1.	PO1, PO2, PO3 & PO5	CO1	MI
2.	PO2, PO3 & PO4	CO2 & CO4	M2
3.	PO1 & PO4	CO1 & CO3	M3
4.	PO2 & PO3	CO1, CO3 & CO4	M4
5.	PO2, PO3 & PO5	CO2 & CO3	M5

Suggested Readings

1. Cliffton, Davis S and Fyfie, David E. "Project Feasibility Analysis". 1977 John Wiley, New York.
2. Desai, A N. "Entrepreneur & Environment". 1990. Ashish , New Delhi.
3. Drucker, Peter. "Innovation and Entrepreileurship". 1985. Heinemann, London.
4. Jain Rajiv. "Planning a Small Scale Industry: A Guide to Entrepreneurs".1984 S.S Books, Delhi.
5. Kumar, S.A. "Entrepreneurship in Small Industry".1990.Discovery, New Delhi.
6. McClelland, D C and winter, W G. "Motivating Economic Achievement".1969. Free Press, New York.
7. Pareek, Udai and VenkateswaraRao, T."Developing Entrepreneurship –A Handbook on Learning Systems".1978.Learning Systems, Delhi.

The list of cases and specific references including recent articles and reports will be announced in the class at the time of launching of the course.

MBA-PC-401: STRATEGIC MANAGEMENT
Credit: **3**
Total Allotted Hours: **45 [30-15-0]**

Pre-requisite(s): *To know the existence of management as a tool for making strategic decision.*

Objectives
To understand Strategy formulation process and frameworks, tools and techniques of strategic analysis and its application. To know Key business issues/challenges/problems of business in light of dynamic business environment Identification, appreciation and interpretation of the critical challenges and opportunities before an organization.

Course Outcomes (COs)
Upon successful completion of this course, students will be able to:

- **CO1:** Develop their capacity to think and execute strategically.
- **CO2:** Demonstrate effective application of concepts, tools & techniques to practical situations for diagnosing and solving organizational problems.
- **CO3:** Developing and executing strategies and will appreciate its integrative and interdisciplinary nature.
- **CO4:** Demonstrate a clear understanding of the concepts, tools & techniques used, theories, background work, concept & research.

Course Contents

Module-1
Introduction: Business Policy and Strategy. Nature and Scope of Strategic Management, Corporate level Strategy, and Business level Strategy, Model for Strategic Management Process – Resource Based View – Fit vs. Stretch. Vision, Mission and objectives (including Social Responsibilities), Strategists. **[5-5-0]***

Module-2
Analysis and Diagnosis of Internal and External Environment: Factors, Techniques of internal analysis, Concept of SAP, Techniques of Environmental Analysis, ETOP and PESTEL. Gap Analysis, SWOT Analysis, and SPACE Analysis. **[6-2-0]***

Module-3
Industry Analysis: Potential Industry Earnings (PIE),Competitive strategies for emerging, decline and fragmented Industries. **Market Situation Analysis**: Generic Strategies, Overall Cost leadership, Differentiation, Focus, Follower Strategies and Nicher Strategies. **Business Portfolio Analysis:** BCG Matrix, GE Stoplight, Hofer’s Model. **[8-4-0]***

Module-4
Strategic Alternatives: Generic Strategies–Overall Cost leadership, Differentiation, Focus, Stable Growth, Growth, Internal Growth (Diversification), External Growth (Merger & Acquisition), Internal External Growth (Strategic Alliance), Turnaround, Retrenchment and Combination Strategies. Strategic Choice-Corporate strategy and Competitive strategy. **[6-2-0]***

Module-5

Strategic Implementation, Evaluation and control: Strategy and structure, Strategic Budgeting, Financial Policy & Strategic Planning, Leadership implementation, Organizational effectiveness. Evaluation of Strategy, Balance Score Card (BSC), Strategic Control and Operational Control. Case studies**. [5-2-0]***

***L-T-P**

Programme Outcomes, Course Outcomes (COs) and Modules Mapping

Sl.	Programme Outcomes	Course Outcomes	Modules
1.	PO1, PO2, PO3 & PO5	CO1	MI
2.	PO2, PO3 & PO4	CO2 & CO4	M2
3.	PO1 & PO4	CO1 & CO3	M3
4.	PO2 & PO3	CO1, CO3 & CO4	M4
5.	PO2, PO3 & PO5	CO2 & CO3	M5

Suggested Readings

1. Drucker, P.F. The Changing World of the Executive. New York, Times Books.
2. David Fred. Strategic Management. 7th ed. Englewood Cliffs. New Jersey, Prentice Hall Inc.
3. Hamel, G and Prahalad, C.K. Competing for the future. Boston, Harvard Business School Press.
4. Glueck, W.F. Strategic Management and Business Policy. McGraw-Hill.
5. Hax,A.C and Majluf, N.S. Strategic Management. Englewood Cliffs. New Jersey, Prentice Hall Inc.
6. Ansoff, H.I.Implementing Strategic Management. Englewood Cliffs. New Jersey, Prentice Hall Inc.
7. Strategy and the business Landscape by Pankaj Ghemawat; Create Space Independent Publishing Platform,Pearson, Fourth Edition

The list of cases and specific references including recent articles and reports will be announced in the class at the time of launching of the course.

MBA-AEC- 405: PROFESSIONAL COMMUNICATION & EMPLOYABILITY SKILL
Credit: 3
Total Allotted Hours: 45 [15-0-30] *

Pre-requisite(s): *None*

Objectives
The objective of this paper is to provide a comprehensive introduction to the principles and practices of professional communication and career readiness in a modern business enterprise. It focuses on how graduating managers maximize their employment potential through key career placement execution phases: corporate networking, advanced résumé engineering, comprehensive interview preparation, and psychometric evaluation navigation, alongside dynamic workplace interpersonal skills.

Course Outcomes (COs)
Upon successful completion of this course, students will be able to:
- **CO 1:** Understand the core concepts of corporate communication, professional personal branding, and the objective of employment optimization.
- **CO 2:** Evaluate corporate opportunities and design high-impact résumés and cover letters using targeted structural tailoring techniques.
- **CO 3:** Analyse corporate selection dynamics and master advanced interviewing frameworks utilising a structured verbal strategy.
- **CO 4:** Formulate effective responses to group discussions and psychometric assessments based on leadership theories and team dynamics.
- **CO 5:** Assess and manage professional workplace entry requirements to ensure immediate organisational assimilation and communication efficiency.

Course Contents

Module-1
Personal Branding & Corporate Job Seeking Frameworks -Meaning, scope, and objectives of employability skills (Accreditation vs. Personal Branding). Functions of a job-seeking manager: Industry alignment, digital networking, and application strategy decisions. Time Value of Networking (TVN): Establishing profiles on digital professional platforms (LinkedIn), informational interviewing, and portfolio building. Job Search Channels: Campus placements, executive search firms, direct corporate hunting, and niche employment boards. **[2-0-4]***

Module-2
Advanced Résumé Engineering & Written Pitching -Specific components of chronological, functional, and hybrid résumés. Optimisation for Applicant Tracking Systems (ATS), keyword density mapping and the role of action-verb utilisation metrics in selection. Cover Letter Frameworks: Attention-Interest-Desire-Action (AIDA) model application, pain-spotting pitches, and referral leverage. Portfolio Management: Case studies write-ups, industry project documentation, and digital artifact presentation frameworks. **[2-0-8]***

Module-3

The Corporate Interviewing Process- Importance, structural phases, and corporate selection rationale. Interviewing Evaluation Techniques (Non-Verbal): Body language decoding, formal business dress codes, micro-expression management, and spatial presence. Evaluation Techniques (Verbal): Navigating situational questions via the STAR (Situation, Task, Action, Result) method, answering stress questions, handling technical domain evaluations, and managing salary negotiation discussions. Advanced Interview Topics: Panel interviews, asynchronous video assessments (AI-driven), structural exit strategies, and post-interview follow-up protocols. **[3-0-8]***

Module-4
Group Dynamics & Psychometric Evaluations
Concepts of collaborative group evaluations: Leadership execution vs. consensus building, group presentation strategies, and forecasting panel expectations. Other Components of Corporate Selection Filters: Navigating Case-based Group Discussions, Abstract Topic analysis, Cognitive Ability Tests, Situational Judgment Tests (SJTs), and corporate personality assessment tools. **[4-0-4]***

Module-5
Workplace Assimilation & Transition Skills
Concept, types of professional reporting, and factors influencing corporate communication success. Business Presentation Theories: Slide construction mechanics, vocal modulation, and dealing with Q&A pressures. Workplace Interpersonal Dynamics: Cross-cultural communication frameworks, professional email etiquette, constructive feedback reception, conflict resolution strategies, and corporate governance compliance protocols. **[4-0-6]***
***L-T-P**

Programme Outcomes, Course Outcomes (COs) and Modules Mapping

Sl.	Programme Outcomes	Course Outcomes	Modules
1.	PO1, PO3 & PO5	CO1	MI
2.	PO1, PO3 & PO5	CO1 & CO2	M2
3.	PO1, PO3 & PO5	CO1 & CO3	M3
4.	PO1, PO3 & PO5	CO1 & CO4	M4
5.	PO1, PO3 & PO5	CO1 & CO5	M5

Suggested Readings

1. Lehman, C. M., DuFrene, D. D., & Sinha, M., BCOM: A South-Asian Perspective, Cengage Learning.
2. Lesikar, R. V., Flatley, M. E., Rentz, K., & Pande, N., Business Communication: Making Connections in a Digital World, McGraw Hill Education.
3. Bovee, C. L., Thill, J. V., & Raina, R. L., Business Communication Today, Pearson Education.
4. HBR Guide (Compilation), HBR Guide to Better Business Writing, Harvard Business Review Press.
5. Doyle, P., The Complete Job Interview Handbook, Kogan Page.

The list of cases and specific references including recent articles and reports will be announced in the class at the time of launching of the course.

MBA-PE-F-1: CORPORATE FINANCIAL REPORTING

Credit: **3**
Total Allotted Hours: **45 [30-15-0] ***

Pre-requisite(s): *Financial Accounting & Analysis (1st Semester)*

Objectives
The primary objective of this paper is to provide an advanced understanding of corporate financial reporting, its regulatory architecture in India, and the strategic implications of global accounting standard convergence.
Course Outcomes (COs)
Upon successful completion of this course, students will be able to:

- **CO1:** Develop the analytical skills required to interpret complex financial statements and evaluate the quality of corporate disclosures.
- **CO2:** Understand the requirement of selected legacy Indian Accounting Standards (AS) and the converged Indian Accounting Standards (Ind AS).
- **CO3:** Understand the mechanics of consolidated reporting and prepare Consolidated Financial Statements.
- **CO4:** Analyse the financial reporting implications of major corporate restructurings like mergers, acquisitions, and share buybacks

Course Contents

Module-1
Objectives and users of financial reporting- Structural anatomy of a modern Indian corporate annual report (Financial statements, Notes to Accounts, MDA, Corporate Governance Report)- Concept and evolution of GAAP. The roadmap of Indian convergence from Indian GAAP (AS) to IFRS-converged standards (Ind AS). Understanding the dual-carriageway system in India for applicable companies-The regulatory ecosystem in India: Role of the Ministry of Corporate Affairs (MCA), National Financial Reporting Authority (NFRA), SEBI, and the Institute of Chartered Accountants of India (ICAI)- Role of the Auditors [**6-0-0]***

Module-2
Measurement, Recognition, and Disclosure Issues (AS vs. Ind AS): AS 1, AS 2, AS 4, AS5, AS 6, AS 9, AS 10, AS 17 and corresponding Ind AS **[8-6-0]***

Module-3
Contextualizing consolidation in India: Principles of preparing Consolidated Financial Statements (CFS)-Advanced adjustments under AS 21 / Ind AS 110: Calculation of non-controlling interest (Minority Interest), Goodwill or Gain on Bargain Purchase (Capital Reserve), and treatment of unrealized inter-company profits- Regulatory requirements under Section 129(3) of the Companies Act, 2013**.[6-4-0]***

Module-4

Accounting issues in M&A: Amalgamations in the nature of merger vs. purchase. Introduction to Ind AS 103 (Business Combinations) -Valuation of business enterprises (including Goodwill), calculation of Purchase Consideration, and establishing the Share Swap Ratio. **[6-3-0]***

Module-5

Buyback of Shares: Regulatory framework for Buyback of Shares under Section 68 of the Indian Companies Act, 2013 and SEBI Buyback Regulations- Accounting entries for buybacks. Analyzing the post-buyback effects on earnings per share (EPS), capital structure ratios, and the overall look of the Post-Buyback Financial Statements**[4-2-0]***

***L-T-P**

Programme Outcomes, Course Outcomes (COs) and Modules Mapping

Sl.	Programme Outcomes	Course Outcomes	Modules
1.	PO1, PO2 & PO4	CO1	MI
2.	PO1, PO2 & PO4	CO1 & CO2	M2
3.	PO1, PO2 & PO4	CO1 & CO3	M3
4.	PO1, PO2 & PO4	CO1, CO2 & CO4	M4
5.	PO1, PO2 & PO4	CO1, CO2 & CO4	M5

Suggested Readings

1. Shukla, Grewal, Gupta, Advanced Accounts, Part-II , , Sultan Chand & Co, New Delhi.
2. Fraser, L. M., &Ormiston, A., Understanding Financial System, PHI, New Delhi.
3. Foster, G, Financial Statement Analysis, PHI, New Delhi.
4. Indian Accounting Standards , MCA, Government of India.
5. Saudagaran, S., International Accounting: A Users Perspective,Taxmann, New Delhi.
6. Banerjee, B., Regulation of Corporate Financial Reporting in India, World Press.
7. International Financial Reporting Standards, IASB, U.K

The list of cases and specific references including recent articles and reports will be announced in the class at the time of launching of the course.

MBA-PE-F-2: FINANCIAL STATEMENT ANALYSIS

Credit: **3**
Total Allotted Hours: **45 [30-15-0] ***

Pre-requisite(s): *Accounting & Financial Management (1st & 2nd Semester).*

Objectives
The objective of this paper is to equip students with the skills required to look beyond the surface of structured financial numbers, evaluate the true economic reality of an enterprise, and make informed business decisions.
Course Outcomes (COs)
Upon successful completion of this course, students will be able to:

- **CO 1**: Evaluate the quality of corporate financial disclosures and detect potential red flags or earnings management indicators.
- **CO 2**: Perform horizontal, vertical, and trend analysis alongside comprehensive ratio breakdowns to diagnose a firm's operational and financial performance.
- **CO 3**: Formulate deep-dive adjustments for complex reporting items including inventories, fixed assets, deferred taxes, and off-balance sheet liabilities.
- **CO 4**: Deconstruct corporate profitability using structured frameworks (DuPont decomposition) and conduct financial forecasting.

Course Contents

Module-1
Introduction and Need for Financial Statement Analysis (FSA)- Components of a complete set of financial statements- Assessing the "Quality of Financial Reporting" and examining cross-border disclosure issues- Mechanics and motivations behind Earnings Management- Red Flags in corporate annual reports. **[4-0-0]***

Module-2
Advanced Ratio Analysis- Exploring different categories of ratios: Liquidity, Solvency, Turnover, and Core Profitability indicators - Managing the inherent limitations of traditional ratio analysis-Analysis of Cash Flows-Evaluating the relationship between net accounting income and actual operating cash flows- Cash Flow Statement Ratios to measure liquidity and capital efficiency **[8-6-0]***

Module-3
Financial Analysis: Structural analysis using Common-Size Statements. Executing Vertical Analysis across industries and Long-term Trend Analysis (Horizontal Analysis) to trace financial trajectories**.[6-3-0]***

Module-4

Analysis of Assets and Liabilities: Analysis of Inventories – Fixed Assets – Depreciations and Impairment – Income Taxes – Deferred Taxes – Liabilities – Leases and off-Balance Sheet Debt **[6-3-0]***

Module-5

Profitability Analysis: ROCE & ROE relationship–Decomposition of ROE - Linkages of Profitability Ratios and firm Value–Credit Analysis - Financial Statement Forecasting – Asset-Based Valuation Models – Tobin's Q Ratio **[6-3-0]***

***L-T-P**

Programme Outcomes, Course Outcomes (COs) and Modules Mapping

Sl.	**Programme Outcomes**	**Course Outcomes**	**Modules**
1.	PO1, PO2, PO4 & PO5	CO1	MI
2.	PO1, PO2 & PO4	CO1 & CO2	M2
3.	PO1, PO2 & PO4	CO1 & CO2	M3
4.	PO1, PO2 & PO4	CO1 & CO3	M4
5.	PO1, PO2 & PO4	CO1 & CO4	M5

Suggested Readings:

1. White, G.I., Sondhi, A.C., & Fried D.: The Analysis and Use of Financial Statements, John Wiley & Sons.
2. Fraser, L. M., & Ormiston, A., Understanding Financial System, PHI, New Delhi.
3. Foster, G, Financial Statement Analysis, PHI, New Delhi.
4. Penman, Financial Statement Analysis, McGraw Hill

The list of cases and specific references including recent articles and reports will be announced in the class at the time of launching of the course.

MBA-PE-F-3: INDIAN TAXATION LAWS

Credit: **3**
Total Allotted Hours: **45 [30-15-0] ***

Pre-requisite(s): *Basic knowledge in economics, accountancy & financial management.*

Objectives
The objective of this paper is to make the students familiar with laws, acts, rules, regulations & statutes related with direct taxes & indirect taxes in India . The main focus, however, is in their applications in tax consultancies.
Course Outcomes (COs)
Upon successful completion of this course, students will be able to:

- **CO1:** Awareness on the various types of laws & their recent amendments related to direct & indirect taxes.
- **CO2:** Prepare tax planning schedule & explore relevant computational procedures in corporate taxation.
- **CO3:** Dealing with return filing & legal notices for taxation.
- **CO4:** Apply tax consultancy in the context of managerial decision-making.

Course Contents

Module-1
Direct & Indirect Tax: Role of Tax structure in an economy; Tax & Budget. Old system Vs. New system; Income Tax Act; GST Act(s) and Rule(s); Recent amendments of relevant Laws for Direct & Indirect taxes in India. **[5-0-0]***

Module-2
Concepts of Personal & Corporate Income Tax: Residential status; Computation of income under Different Heads of Income, set off and Carry forward of Losses, Provisions relating to MAT, Computation of Tax Liability. **[10-5-0]***

Module-3
Tax Planning: Meaning and Scope of Tax Planning, Avoidance & Management; ITR & Notices; TDS & TCS. **[5-0-0]***

Module-4
Tax Considerations in respect of Specific Managerial Decision: Make or Buy, Own or Lease, Close or Continue, Sale in Domestic Markets or Exports; Replacements and Capital Budgeting Decisions, etc. **[5-5-0]***
Module-5
Indirect Tax: Concept of GST; SGST, CGST, IGST, UTGST; Place of Supply, Date of Supply, Value of Supply; Composite Supply; Reverse Charge Mechanism in GST; Nil rated supply Vs. Zero rated supply. **[5-5-0]***

***L-T-P**

Programme Outcomes, Course Outcomes(COs) and Modules Mapping

Sl.	Programme Outcomes	Course Outcomes	Modules
1.	PO1, PO2 , PO3 & PO5	CO1	MI
2.	PO1, PO3 & PO4	CO3 & CO4	M2
3.	PO3 & PO4	CO2 & CO3	M3
4.	PO1, PO3 & PO4	CO1, CO3 & CO4	M4
5.	PO2, PO3 & PO5	CO2 & CO3	M5

Suggested Readings

1. Ahuja. G K & Gupta, Ravi, Systematic Approach to Income Tax. Allahabad, Bharat Law House.
2. Lyengar, A C. Sampat, Law of Income Tax. Allahabad, Bharat Law House.
3. Kanga. J B and Palkhivala, N A., Income Tax. Bombay, Vol. 1 -3, N.M. Tripathi.
4. Ranina, H P., Corporate Taxation: A Handbook. New Delhi, Oriental Law House.
5. Singhania. V K., Direct Taxes Law and Practice. Delhi. Taxman.
6. Srinivas, E A., Handbook of Corporate Tax Planning. New Delhi, Tata McGrawHill.

The list of cases and specific references including recent articles and reports will be announced in the class at the time of launching of the course.

MBA-PE-F-4: FINANCIAL SERVICES
Credit: **3**
Total Allotted Hours: **45 [30-15-0] ***

Pre-requisite(s): *Basic knowledge in mathematics & financial management.*

Objectives
The objective of this course is to help students to learn the various financial services and their role in the overall financial system with special emphasize on India.

Course Outcomes (COs)
Upon successful completion of this course, students will be able to:

- **CO1:** Awareness on the various types of financial services in India.
- **CO2:** Learn the role of such financial services in Indian financial system.
- **CO3:** Explore the various issues & challenges in Indian financial markets.
- **CO4:** Understand the integration of financial services for managerial decision making.

Course Contents

Module-1
Financial System, Financial Markets, Regulatory Bodies & Financial Institutions. **[5-0-0]***

Module-2
Money Market & Capital Market; Depository System & Depository Participants; Book building process, ADR & GDR. Broking Services & equity trading; Mutual Funds: Concepts, Types of schemes & Advantage. **[10-5-0] ***

Module-3
Types of banks in India – Role of RBI as a regulator – Management of NPA- NBFCs-NABARD. **[5-5-0] ***

Module-4
Need and importance of Life and nonlife Insurance-Players in life and non-life insurance – Essentials of insurance contracts – Risk appraisal– Role of IRDA. **[5-5-0] ***

Module-5: Lease and Hire purchase; . Credit rating; Venture Capital. **[5-0-0] ***

***L-T-P**

Programme Outcomes, Course Outcomes(COs) and Modules Mapping

Sl.	Programme Outcomes	Course Outcomes	Modules
1.	PO1, PO3 & PO4	CO1	MI
2.	PO2, PO3 & PO5	CO3 & CO4	M2
3.	PO3 & PO5	CO1 & CO3	M3
4.	PO1 & PO4	CO1, CO3 & CO4	M4
5.	PO1, PO2 & PO5	CO2 & CO4	M5

Suggested Readings

1. Financial Services – M.Y. Khan – Tata McGraw Hill
2. Financial Services & Systems – S.G. Guruswamy – Thomson Learning
3. Indian Financial System – M.Y. Khan – TMH
4. Financial Services – Gordon &Natarajan – HPH
5. Merchant Banking Principles and Practice: H.R. Machiraju – New Age Internationals
6. Financial Institutions and Markets – L.M. Bhole – TMH

The list of cases and specific references including recent articles and reports will be announced in the class at the time of launching of the course.

MBA-PE-F-5: INVESTMENT ANALYSIS & PORTFOLIO MANAGEMENT

Credit: **3**
Total Allotted Hours: **45 [30-15-0]***

Pre-requisite(s): *Accounting & Financial Management (1st & 2nd Semester).*

Objectives
The objective of this course is to provide students with a conceptual and practical framework for evaluating individual securities and managing investment portfolios. Designed for future financial managers, analysts, and wealth managers, this course combines fundamental security analysis with quantitative portfolio construction, risk management strategies, and performance evaluation techniques within the Indian regulatory environment.

Course Outcomes (COs)
Upon successful completion of this course, students will be able to:

- **CO 1**: Map the structure of Indian financial markets and differentiate financial instruments based on risk, return, and regulatory compliance.
- **CO 2**: Conduct economic, industry, and company (EIC) analysis to estimate the intrinsic value of equity shares using valuation models and apply technical analysis in security selection.
- **CO 3**: Understand the niceties of Indian Bond Market, formulate fixed-income valuation models, analyse yield curves, and measure bond price sensitivity using duration.
- **CO 4**: Apply Markowitz Mean-Variance optimization and the Capital Asset Pricing Model (CAPM) to construct efficient portfolios.
- **CO 5**: Evaluate portfolio performance using Risk-Adjusted performance metrics

Course Contents

Module-1
The concept of investment, Return & Risk: Speculation, and gambling -The investment process and asset allocation overview -The Indian Financial Ecosystem: Primary vs. Secondary Markets. Dematerialization, settlement cycles and algorithmic trading - Measurement of Risk and Return: Calculating historical and expected returns, realised vs. unrealised gains - Quantifying risk, and systematic vs. unsystematic risk. **[5-0-0] ***

Module-2
Equity Analysis & Valuation: Fundamental Analysis Framework (EIC Framework) – Equity Valuation Models: Dividend Discount Models (Constant and Multi-stage growth models) – H Model- Relative Valuation multipliers -Technical Analysis and Behavioural Finance-The Efficient Market Hypothesis (EMH) . **[10-6-0] ***

Module-3

Debt Analysis: Introduction to the Indian Debt Market-Bond Valuation and Yields: Pricing of coupon and zero-coupon bonds. Understanding Yield to Maturity (YTM), Yield to Call (YTC), and the term structure of interest rates (Yield curves). **[3-2-0] ***

Module-4

Modern Portfolio Theory (MPT): Diversification and Markowitz Portfolio Theory -The Mean- variance Criterion- Portfolios of Two Securities- The Efficient Frontier-Capital Asset Pricing Model – Capital Market Line-Security Market line; Factor Models and Arbitrage Pricing Theory and Multi-Factor Models**. [9-5-0]***

Module-5

Portfolio Performance Evaluation: Risk-Adjusted Performance Measures: Evaluating portfolio manager performance using the Sharpe Ratio, Treynor Ratio, and Jensen's Alpha. Information Ratio and the Fama Decomposition model. **[3-2-0] ***

***L-T-P**

Programme Outcomes, Course Outcomes(COs) and Modules Mapping

Sl.	Programme Outcomes	Course Outcomes	Modules
1.	PO1, PO2 & PO4	CO1	MI
2.	PO1, PO2 & PO4	CO1 & CO2	M2
3.	PO1, PO2 & PO4	CO1 & CO3	M3
4.	PO1, PO2 & PO4	CO1 & CO4	M4
5.	PO1, PO2 & PO4	CO1 & CO5	M5

Suggested Readings

1. 1.Jordon & Fisher, Security Analysis & Portfolio Management Prentice Hall of India.
2. Reily, K.Frank, Investment Analysis & Portfolio Management, South Western, Thompson
3. DamodaranAswath, Investment Valuation, John Wiley & Sons, Inc.
4. Elton Edwin J. & Gruber Maltion J., Modern Portfolio Theory, John Wiley & Sons, Inc.
5. Bodie, Kane,Marcus, Investment, , Tata McGraw Hill. 6. Chandra P., Investment Analysis & Portfolio Management, Tata McGraw Hill
6. Strong, R.A., Practical Investment Management, Thompson/Southwestern

The list of cases and specific references including recent articles and reports will be announced in the class at the time of launching of the course.

MBA-PE-F-6: MANAGEMENT CONTROL SYSTEMS

Credit: **3**
Total Allotted Hours: **45 [30-15-0] ***

Pre-requisite(s): *Accounting & Financial Management (1st & 2nd Semester).*

Objectives
The objective of this course is to provide students with a conceptual and practical framework for evaluating organisational performance and managing business control frameworks. Designed for future financial managers, corporate controllers, and operational heads, this course combines fundamental management control principles with quantitative budgeting techniques, divisional performance indicators, and strategic cost architectures to drive long-term business success.

Course Outcomes (COs)
Upon successful completion of this course, students will be able to:

- **CO 1**: Map the framework of management control systems, differentiate them from strategic and operational controls, and establish goal congruence.
- **CO 2**: Classify responsibility centres and evaluate operational expenses and cost variances in line with the controllability principle.
- **CO 3**: Formulate cost-based and market-based transfer pricing frameworks to resolve inter-divisional tax and goal-alignment issues.
- **CO 4**: Apply quantitative (ROI, RI, EVA) and qualitative frameworks to measure and analyse divisional financial performance.
- **CO 5**: Synthesise short-term cost information to make relevant pricing and corporate operational decisions.
- **CO 6**: Analyse modern strategic cost management techniques across manufacturing and service sectors.

Course Contents

Module-1
Management Control System: Characteristics of Management Control Systems and their evolution within an organisation- Relating the control architecture directly to formal organisational objectives -Distinguishing among Strategic Planning, Management Control, and Operational Control. Operationalising the core philosophy of Goal Congruence -Roles and organisational functions of the Corporate Controller- Different types of organisational controls. **[4-0-0] ***

Module-2
Organisational structures: Responsibility Centres and their core classifications. Detailed analysis of Expense Centers, Profit Centers, and Investment Centres under the strict boundaries of the Controllability Principle- Budgetary Control as a tool for Management Control Systems – Understanding motivation, employee morale, and human behavioural issues during the budgeting process – Engineered, Discretionary and Committed Costs – Fixed vs. Flexible Budget – Variance Analysis. **[6-3-0] ***

Module-3
Transfer Pricing: Core concept and organizational objectives of Transfer Pricing. Managing inter-divisional conflicts to maintain company-wide Goal Congruence –Methodological applications: Evaluating Market-based Transfer Pricing versus Cost-based Transfer Pricing mechanisms. **[6-3-0] ***

Module-4
Measurement of Divisional Performance: Balanced frameworks combining qualitative indicators with quantitative output Metrics-Quantitative financial performance indicators: Comprehensive analysis of Return on Investment (ROI) vs. Residual Income (RI). Managing complex corporate Revenue Allocation Issues. **[4-2-0]***

Module-5
Cost Analysis for Decision Making: Identifying Relevant Costs, quantifying Opportunity Costs, and isolating Sunk Costs in business options - Short-term asset management and commercial Pricing Decisions under capacity constraints. **[4-3-0] ***

Module-6
Strategic Cost Management tools: Implementing Activity-Based Costing (ABC) and Target Costing frameworks within complex supply chains- Life-cycle Costing and operationalising Value Chain Analysis to optimise organisational cost structures –Implementing the Balance Scorecard and Economic Value Added (EVA) as standard metrics for management performance evaluation - Comparative analysis of Management Control Systems in the Service Sector vis-à-vis execution in the Manufacturing Sector. **[6-4-0] ***

***L-T-P**

Programme Outcomes, Course Outcomes(COs) and Modules Mapping

Sl.	Programme Outcomes	Course Outcomes	Modules
1.	PO1, PO2 & PO4	CO1	MI
2.	PO1, PO2 & PO4	CO1 & CO2	M2
3.	PO1, PO2 & PO4	CO1 & CO3	M3
4.	PO1, PO2 & PO4	CO1 & CO4	M4
5.	PO1, PO2 & PO4	CO1 & CO5	M5
6.	PO1, PO2 & PO4	CO1 & CO6	M6

Suggested Readings

1. Anthony, R. N., & Govindarajan, V., Management Control Systems, McGraw-Hill / Tata McGraw-Hill.
2. Merchant, K. A., & Van der Stede, W. A., Management Control Systems: Performance Measurement, Evaluation and Incentives, Financial Times / Prentice Hall.
3. Shank, J. K., & Govindarajan, V., Strategic Cost Management: The New Tool for Competitive Advantage, The Free Press.
4. Horngren, C. T., Datar, S. M., & Rajan, M. V., Cost Accounting: A Managerial Emphasis, Pearson Education.
5. Zimmerman, J.A., Accounting for Decision Making & Control, New York, Mc-Graw Hill Inc.
6. Colin Drury, Management & Cost Accounting, New Delhi, Thomson Learning.
7. Kaplan, R. S., & Norton, D. P., *The Balanced Scorecard: Translating Strategy into Action*, Harvard Business Review Press.

The list of cases and specific corporate references including recent research papers and market reports will be announced in the class at the time of launching the course

MBA-PE-F-7: STRATEGIC FINANCIAL MANAGEMENT
Credit**: 3**
Total Allotted Hours**: 45 [30-15-0]***

Pre-requisite(s): *Financial Management (2nd Semester)*

Objectives
The objective of this course is to provide students with a conceptual and practical framework for planning, executing, and controlling financial strategies to maximise enterprise value. Designed for future financial managers, corporate strategists, and consultants, this course combines strategic financial policy formulation with quantitative corporate valuation methodologies, capital structure optimisation techniques, and restructuring strategies within the global and Indian regulatory environments.
Course Outcomes (COs)
Upon successful completion of this course, students will be able to:

- **CO 1:** Align corporate growth objectives with financial strategy by evaluating organic versus external long-term growth drivers.
- **CO 2:** Analyse alternative capital structures and optimise financing strategy using structural theories and hybrid financial instruments.
- **CO 3:** Formulate corporate valuation frameworks utilizing Asset Beta, Weighted Average Cost of Capital (WACC), Adjusted Present Value (APV), and Free Cash Flow models.
- **CO 4:** Evaluate strategic investment ideas and appraise corporate value creation alongside project risk parameters.
- **CO 5:** Measure and critique shareholder value creation using EVA® & MVA Framework
- **CO 6:** Structure mergers and acquisitions, establish swap exchange ratios, compute purchase considerations, and design takeover defences.

Course Contents

Module-1
Financial Policy & Strategic Planning: Components of financial strategy, alternative strategies for long-term growth, and growth drivers - Evaluation of organic growth versus external growth models and matching financial policy to overarching organisational strategic goals. **[4-0-0]***

Module-2
Financing Strategy & Capital Structure: Financing Strategy: Capital Structure Theories and the operationalisation of leverage- Evaluation and valuation of Hybrid Financial Instruments in corporate funding structures. **[6-3-0]***

Module-3
Business Valuation & Value Linkages: Linkage between financial strategy & Firm's value-Exploration of the concept of Asset Beta, Weighted Average Cost of Capital (WACC), and the Adjusted Present Value (APV) valuation methodologies- Practical application of Free Cash Flow Valuation Models. **[10-6-0]***

Module-4
Investment Strategy & Shareholders' Value Creation: Linkage between Investment Strategy & Corporate Value Creation-Generation & Screening of Project Ideas, Analysis of Project Risk- Shareholders' value creation & measurement: Concept of EVA & MVA- Analysing the underlying management problems with standard shareholder value concepts. **[4-2-0]***

Module-5
Mergers, Acquisitions & Corporate Control: Mergers and Acquisitions: identifying when corporate combinations make strategic sense- Exchange Ratios and Purchase Consideration- Evaluating the effect of Mergers on EPS and the strategic sharing of Merger Gains- Designing Takeover Defences and Navigating the Active Market for Corporate Control. **[6-4-0]***

***L-T-P**

Programme Outcomes, Course Outcomes (COs) and Modules Mapping

Sl.	Programme Outcomes	Course Outcomes	Modules
1.	PO1, PO2 & PO4	CO1	MI
2.	PO1, PO2 & PO4	CO1 & CO2	M2
3.	PO1, PO2 & PO4	CO1 & CO3	M3
4.	PO1, PO2 & PO4	CO1, CO4& CO5	M4
5.	PO1, PO2 & PO4	CO1 & CO6	M5

Suggested Readings

1. Prasanna Chandra, Financial Management: Theory and Practice, McGraw Hill Education.
2. Aswath Damodaran, Investment Valuation: Tools and Techniques for Determining the Value of Any Asset, John Wiley & Sons, Inc.
3. Allen, Brealey, Myers, and Mohanty, Principles of Corporate Finance, Tata McGraw Hill.
4. SFC Sridhar, Strategic Financial Management, Taxmann Publications.
5. Ravi M. Kishore, Strategic Financial Management, Taxmann Publications.

The list of cases and specific references including recent articles and reports will be announced in the class at the time of launching of the course.

MBA-PE-F-8: INTERNATIONAL FINANCIAL MANAGEMENT
Credit**: 3**
Total Allotted Hours**: 45 [30-15-0] ***

Pre-requisite(s)**:** *Financial Management (2nd Semester)*

Objectives
This course aims to provide a theoretical and practical understanding of issues involved in international financial management from the perspective of a firm engaged in multinational business. It focuses on navigating the international monetary landscape, managing foreign exchange risks, making cross-border investment decisions, and optimising global financing strategies within modern corporate frameworks.
Course Outcomes (COs)
Upon successful completion of this course, students will be able to:

- **CO 1:** Understand the core concepts of international financial architecture, the international monetary system, and the distinction between macro-level environments.
- **CO 2:** Evaluate parity conditions and identify the core economic factors driving exchange rate determination and country risks.
- **CO 3:** Analyse the instruments of the foreign exchange market and utilise derivatives to capitalise on market opportunities.
- **CO 4:** Formulate robust risk management strategies to hedge transaction, translation, and economic exposures.
- **CO 5:** Assess and manage long-term international capital budgeting projects along with short-term trade financing requirements.
- **CO 6:** Design optimal international financing structures using global capital market instruments like ADRs, GDRs, and IDRs.

Course Contents
Module-1
International Monetary System & Macro Environment: Nature & Scope of International Financial Management; Evolution of the International Monetary System: Bretton Woods conference and afterwards; Role of the IMF and the World Market. Multilateral Financial Institutions; International investors and Foreign Investment Institutions (FII); Understanding the dynamics of Foreign Direct Investment (FDI) vs. Foreign Portfolio Investment (FPI). **[4-2-0]***
Module-2
Exchange Rate Determination, Parity Conditions & Country Risk: Parity conditions in International Finance; Theories of Exchange Rate Determination and factors influencing Exchange Rates. Introduction to Foreign Exchange & Country Risk Assessment; Managing Political Risk & its implications on MNC operations. **[6-2-0]***

Module-3
Foreign Exchange Derivatives & Market Mechanics : The structure of the Foreign Exchange Market; Operational mechanics of the Spot Market and Forward Market. Introduction to derivative vehicles: Futures Market, Options Market, and Financial Swaps; Identifying and executing market Arbitrage opportunities. **[6-3-0] ***
Module-4
Foreign Exchange Risk & Exposure Management: Understanding Corporate Foreign Exchange Risk Management; Deep-dive into Transaction exposure, Translation exposure, and

Economic exposure. Strategic Management of Exposure: Designing external hedging frameworks and implementing Internal Techniques of Hedging. **[5-3-0] ***

Module-5

International Investment & Working Capital Decisions

International Investment Decisions: Capital Budgeting frameworks for multinational corporations. Current Assets Management, including the Financing of International Trade. Mechanics and Financing of Foreign Trade alongside the Indian Institutional Framework; Evaluation of International Equity Investments. **[5-3-0] ***

Module-6

International Financing & Global Capital Markets

Overview of the International Financial Market and global infrastructure; Identifying strategic International Sources of Finance. Making corporate Financing Decisions: Regulatory and theoretical concepts of Global Depository Receipts (GDRs), American Depository Receipts (ADRs), and Indian Depository Receipts (IDRs). **[4-2-0] ***

***L-T-P**

Programme Outcomes, Course Outcomes (COs) and Modules Mapping

Sl.	Programme Outcomes	Course Outcomes	Modules
1.	PO1, PO2, PO4	CO1	MI
2.	PO1, PO2 & PO4	CO1 & CO2	M2
3.	PO1, PO2 & PO4	CO1 & CO3	M3
4.	PO1, PO2 & PO4	CO1 & CO4	M4
5.	PO1, PO2 & PO4	CO1 & CO5	M5
6.	PO1, PO2 & PO4	CO1 & CO6	M5

Suggested Readings

1. Bhalla, V.K., International Financial Management, Anmol Publications, New Delhi.
2. Madura, Jeff, International Financial Management, South-Western Cengage Learning / Thomson.
3. Apte, P.G., International Financial Management, Tata McGraw Hill, New Delhi.
4. Sharan, V., International Financial Management, Prentice Hall of India (PHI), New Delhi.
5. Vij, Madhu, International Financial Management, Excel Books.
6. Shapiro, A.C., Multinational Financial Management, Prentice Hall of India.
7. Levi, M.D., International Finance, McGraw Hill.

The list of cases and specific references including recent articles and reports will be announced in the class at the time of launching of the course.

MBA-PE-F-9: BUSINESS VALUATION

Credit**: 3**
Total Allotted Hours**: 45 [30-15-0] ***

Pre-requisite(s): *Basic knowledge in mathematics & financial management.*

Objectives
The objective of this paper is to make the students familiar with various valuation techniques. The main focus, however, is in their applications in business decision-making.

Course Outcomes (COs)
Upon successful completion of this course, students will be able to:

- **CO1:** Awareness on the various types of valuation approaches
- **CO2:** Learn the techniques of valuation for various asset classes
- **CO3:** Explore the various practical issues for practicing valuers.
- **CO4:** Understand the implications of guidelines of Insolvency and Bankruptcy Board of India

Course Contents

Module-1
Need for Business Valuation: Valuation Services; Professional Ethics; Asset-Based valuation; Accounting Issues. **[5-0-0]***

Module-2
Valuation of various asset classes: Plant & Machinery, Land & Building, Financial Assets & Contracts; **[5-0-0]***

Module-3
Types of valuation approaches: Income Based valuation – Discounted Cash Flow Valuation; Free Cash Flow to Firm – WACC – APV Valuation. **[5-5-0]***

Module-4
Market Based Valuation: Relative Valuation Approaches; Problems & Issues. **[5-5-0]***

Module-5:
Application of Valuation Techniques: IPOs, Mergers & Acquisitions, Restructuring and Venture Financing; Challenges to valuation; Brand Valuation; Valuation of Intellectual Properties; HR valuations; Goodwill valuation. **[10-5-0]***

***L-T-P**
Programme Outcomes, Course Outcomes(COs) and Modules Mapping

Sl.	Programme Outcomes	Course Outcomes	Modules
1.	PO1, PO2, PO3 & PO5	CO1	MI
2.	PO2, PO3 & PO4	CO2 & CO4	M2
3.	PO1 & PO4	CO1 & CO3	M3
4.	PO2 & PO3	CO1, CO3 & CO4	M4
5.	PO2, PO3 & PO5	CO2 & CO3	M5

Suggested Readings

1. Reily, K.Frank, Investment Analysis & Portfolio Management, South Western, Thompson
2. Damodaran Aswath, Investment Valuation, John Wiley & Sons, Inc.
3. Hearth and Zaima, Contemporary Investments: Security & Portfolio Analysis, HarcourtCollege Publications.
4. Copeland, T., Koller, T. and Murrin, J., Valuation – Measuring and Managing the Value of Companies, John Wiley & Sons Inc.
5. Palepu, K., Healey, P. and Victor, L., Business Analysis & Valuation using Financial Statements, South-Western College Publishing
6. Marren, J.H., Mergers & Acquisitions – A Valuation Handbook, Irwin Professional Publishing

The list of cases and specific references including recent articles and reports will be announced in the class at the time of launching of the course.

MBA-PE-F-10: FINANCIAL DERIVATIVES
Credit: 3
Total Allotted Hours: 45 [30-15-0]*

Pre-requisite(s): *Basic knowledge in mathematics & financial management.*

Objectives
The objective of this paper is to make the students familiar with techniques for hedging using financial derivatives. The main focus, however, is in their applications in trading & investment decision-making.

Course Outcomes (COs)
Upon successful completion of this course, students will be able to:

- **CO1:** Awareness on the various types of financial derivatives & their purpose
- **CO2:** Learn the techniques of hedging using financial derivatives
- **CO3:** Explore the various trading strategies involving financial derivatives.
- **CO4:** Understand the implications of valuation models of financial derivatives.

Course Contents

Module-1
Nature of derivative securities and types of financial derivatives: Purpose of financial derivatives, OI, Implied Volatility & PCR; Derivative pay-off at expiry. **[5-0-0]***

Module-2
Basic characteristics of option contracts: Types of option contracts – Option Pricing & Hedging– Put Call Parity - Option pricing: Upper Bounds & Lower Bounds. **[5-5-0]***

Module-3
Option trading strategy: Spreads, Straddle, Strangle, Iron condor; Buyer's & seller's perspectives. **[5-5-0]***

Module-4
Option Valuation Models: Single-period Vs. Multi-period models – Black Scholes , CRR model, Merton's jump diffusion model; Option Greeks. **[10-5-0]***
Module-5
Futures contracts: Stock index futures & Foreign currency futures; Swap contracts: Origin of swap contracts – Forms of swap contracts. **[5-0-0]***

***L-T-P**

Programme Outcomes, Course Outcomes(COs) and Modules Mapping

Sl.	Programme Outcomes	Course Outcomes	Modules
1.	PO1, PO2 & PO3	CO1	MI
2.	PO2, PO3 & PO4	CO3 & CO4	M2
3.	PO3 & PO4	CO1 & CO3	M3
4.	PO1 & PO4	CO1, CO3 & CO4	M4

5.	PO2, PO3 & PO5	CO2 & CO4	M5

Suggested Readings

1. Mukherjee T, Put & Call Options: Valuation & Strategy, Manorama Publishers, Kolkata.
2. Bhalla,V.K.,: Financial Derivatives, Delhi, S. Chand.
3. Brennet, M. Option Pricing: Theory & Applications, Toronto, Lexington Books.
4. Cox, John C and Rubinstein, Mark. Options Markets. Englewood Cliffs, New Jersey, Prentice Hall Inc.
5. Huang, Stanley S C and Randall, Maury R. Investment Analysis and Management. London, Allyn and Bacon.
6. Hull, John C. Options, Futures and Other Derivative Securities.New Delhi, Prentice Hall of India.
7. Sharpe, William F. etc. Investment, New Delhi, Prentice Hall of India.
8. Mukherjee T, Security Analysis & Portfolio Management (In Indian Stock Market), Manorama Publishers, Kolkata.

The list of cases and specific references including recent articles and reports will be announced in the class at the time of launching of the course.

MBA-PE-M-1: CONSUMER BEHAVIOUR

Credit: **3**
Total Allotted Hours: **45 [30-15-0]***

Pre-requisite(s): *Knowledge of fundamentals of Marketing management and Business Environment*

Objective: To acquaint students with the concepts, theories, and applications of consumer behaviour and enable them to understand consumer decision-making processes for developing effective marketing strategies.

Course Outcomes (COs)

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

- **CO1:** Understand the nature and scope of consumer behaviour and its significance in marketing decisions.
- **CO2:** Analyse the influence of internal and external factors on consumer behaviour.
- **CO3:** Assess consumer decision-making process.
- **CO4:** Examine the models of consumer decision-making for developing marketing strategies

Course Contents

Module-1

Introduction to Consumer Behaviour: Nature, scope and importance of consumer behaviour; Consumer roles; Consumer behaviour in digital and online environments; Green consumer behaviour; Applications of consumer behaviour in designing marketing strategy. Ethical issues in consumer buying behaviour. **[6-3-0]***

Module-2

Individual Determinants of Consumer Behaviour: Perception: factors in perception, perceptual process, factors responsible for perceptual distortion; Learning: Weber's Law, Classical conditioning, operant conditioning- marketing implications, Components of learning process; Personality: meaning, nature and characteristics of personality, stages in the development of personality, personality influences and consumer behaviour; Attitude and behaviour: concept, relationship between attitude and behaviour, factors involved in attitude formation. Attitude changing strategies. Self-Concept and Lifestyles. **[8-3-0]***

Module-3

External Influences – Culture, subculture, social class; family life cycle stages and its marketing implications. Influence of social class, Definition and meaning of social stratification, factors responsible for social stratification, Characteristic features of social classes, Social influence on consumer behaviour. Types of groups. Importance of reference group in shaping consumer behaviour. **[6-3-0]***

Module-4

Consumer Decision Making and Buying Behaviour: Problem recognition, information search, evaluation of alternatives, purchase decision and post-purchase behaviour; Consumer satisfaction concept**,** Cognitive Dissonance, consumer delight, consumer value and value delivery strategies. Customer loyalty and relationship marketing. Consumer Behaviour Studies over the globe**. [6-3-0]***

Module-5

Models of Consumer Behaviour: Howard-Sheth, Nicosia, Engel-Kollat-Blackwell (EKB), and VALS2 model**. [4-3-0]***

***L-T-P**

Programme Outcomes (POs), Course Outcomes (COs) and Modules Mapping

Sl.	Programme Outcomes	Course Outcomes	Modules
1.	PO1, PO2 & PO3	CO1	M1
2.	PO1, PO2& PO5	CO2	M2
3.	PO2, PO3,& PO5	CO2	M3
4	PO1, PO2 & PO4	CO3	M4
5	PO1, PO2, PO3& PO5	CO3 & CO4	M5

Suggested Readings

1. Sheth, Mittal, Consumer Behaviour- A Managerial Perspective, Thomson
2. Ramesh Kumar, S. Conceptual Issues in Consumer Behaviour in Indian Context, Pearson
3. Assael, H. Consumer Behaviour and Marketing Action. Ohio, South Western.
4. Engle, J F. etc. Consumer Behaviour. Chicago, Dryden Press.
5. Howard, John A. etc. Consumer Behaviour in Marketing. Englewood Cliffs, New Jersey, Prentice Hall Inc.
6. Hawkins, DI. etc. Consumer Behaviour: Implications for Marketing Strategy. Texas, Business.
7. Mowen, John C. Consumer Behaviour. New York, MacMillan.
8. Schiffman, L G and Kanuk, L. Consumer Behaviour. New Delhi, Prentice Hall of India.

The list of cases and specific references including recent articles and reports will be announced in the class at the time of launching of the course.

MBA-PE-M-2: SALES AND DISTRIBUTION MANAGEMENT

Credit: **3**
Total Allotted Hours: **45 [30-15-0]***

Pre-requisite(s): *Knowledge of fundamentals of Marketing Management and Business Environment*

Objective: To acquaint the student with the concepts which are helpful in developing a sound sales and distribution policy and in organizing and managing sales force and marketing channels.

Course Outcomes (COs)

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

- **CO1:** Execute sales deals effectively.
- **CO2:** Work with people with different backgrounds, expectations, and values for achieving sales targets.
- **CO3:** Understand and assess the challenges of turbulent business marketing.
- **CO4:** Evaluate and Design efficient sales & distribution strategies

Course Contents

Module-1

Sales Management: Nature and scope of Sales Management, objectives and process of personal selling, types of sales jobs. Importance of sales forecasting, Qualitative and Quantitative methods of sales forecasting. Types of budgets Methods of funding sales force, Sales force size determination**.** **[6 -3-0]***

Module- 2

Territory Management: Nature of sales territories, route and journey cycle planning, procedure for designing sales territories. Types of Quotas and quota-setting procedure.
[8- 3-0] *

Module-3

Sales Force Management: Sources of sales recruits, Selection process, Designing formal sales training programme and Informal training, Leadership skills and Role of the sales manager. Evaluation of performance of sales force. **[6 -3- 0]***

Module-4

Sales Incentives and Compensation: Types of incentives, methods of compensation (fixed, variable component), sales contests and meetings, Fringe benefits. **[6-3-0]***

Module-5

Distribution Management: Physical distribution**:** Definition, importance, participants in physical distribution process. Marketing Channels: Definition and importance, Different forms of channels, Functions of marketing channels. Integrated marketing channels, Horizontal, Vertical and Multi-channel marketing systems. Channel Management – Channel selection criteria, Performance appraisal of channel members, Channel conflict and techniques to resolve channel conflict. **[4-3-0]***

***L-T-P**

Programme Outcomes (POs), Course Outcomes (COs) and Modules Mapping

Sl.	Programme Outcomes	Course Outcomes	Modules
1.	PO1,PO2 & PO5	CO1 & CO3	MI
2.	PO1, PO2, PO3, & PO5	CO1, CO2 & CO4	M2
3.	PO2 & PO5	CO2 & CO3	M3
4.	PO1, PO2 & PO4	CO2	M4
5	PO1,PO2, PO4 & PO5	CO1, CO3 & CO4	M5

Suggested Readings

1. Anderson, R., Professional Sales Management. Englewood Cliffs, New Jersey, Prentice Hall Inc.
2. Anderson, R., Professional Personal Selling. Englewood Cliffs, New Jersey, Prentice Hall Inc.
3. Buskirk, R H and Stanton, W J., Management of Sales Force. Homewood Illinois, Richard D. Irwin.
4. Dalrymple, D J., Sales Management: Concepts and Cases. New York, John Wiley.
5. Johnson, E M etc., Sales Management: Concepts Practices and Cases. New York, McGraw Hill.
6. Stanton, William J etc., Management of a Sales Force. Chicago, Irwin.
7. Stiil, R R., Sales Management, Englewood Cliffs, New Jersey, Prentice Hall Inc.

The list of cases and specific references including recent articles and reports will be announced in the class at the time of launching of the course.

MBA-PE M-3: BRAND MANAGEMENT

Credit: **3**
Total Allotted Hours: **45 [30-15-0]***

Pre-requisite(s): *Knowledge of basics of Marketing Management and Business Environment*

Objective: To equip the student with a comprehensive understanding of practice and principles of brand management, enabling them to develop effective branding strategies and navigate the complexities of modern brand communication channels.

Course Outcomes (COs)
Upon successful completion of this course, students will be able to:

- **CO1:** Understand the concepts and significance of branding and its relationship with products.
  CO2: Analyse components of brand equity, brand identity, and brand image,
- **CO3:** Apply brand positioning and brand development strategies in competitive markets.
  CO4: Evaluate brand performance using qualitative and quantitative tools and develop branding strategies
- **CO5:** Assess brand challenges and presents issues of branding.

Course Contents

Module-1

Introduction to Brand Management: Meaning and Evolution of brands, Brand- product relationship, Brand Hierarchy, Brand Architecture, Brand Association, Brand Loyalty and Brand Switching, Brand personality, Brand Equity – Meaning, Sources, Components, Brand building blocks Model of CBBE. Brand identity and Brand image. **[6-3-0]***

Module-2

Brand Development and Positioning : Role of brand name, naming procedure, Importance of Advertising in brand development. High budget route Vs low budget route of brand development. Brand Life Cycle. Brand Positioning – Meaning, Point of Parity and Point of Difference, Methods of positioning, Brand repositioning. **[8-3-0]***

Module-3

Branding Strategies: Brand Extension: Meaning, Needs, Types, Advantages and Disadvantages of brand extension. Brand Endorsement: Meaning and types Brand Portfolio: Meaning, Advantages, Types of brands in brand portfolio, Strategies for building brand portfolio. **[6-3-0]***

Module-4

Challenges of Branding: Brand Dilution, Brand Imitation and Brand Crisis – meaning, causes and strategies to cope up**. [6-3-0]***

Module-5

Recent Issues in Branding: Global brand strategy, Managing brands over time, Brand audit Branding in digital era, Legal and Ethical aspects of Brand Management. **[4 -3-0]***

***L-T-P**

Programme Outcomes (POs), Course Outcomes (COs) and Modules Mapping

Sl.	Programme Outcomes	Course Outcomes	Modules
1.	PO1& PO2	CO1 & CO2	MI
2.	PO1, PO2, PO3, & PO5	CO3	M2
3.	PO1, PO2 & PO5	CO3 & CO4	M3
4.	PO1, PO2 & PO4	CO1& CO5	M4
5	PO3, PO4 & PO5	CO3 & CO5	M5

Suggested Reading

1. Aaker, David, A. Managing Brand Equity. New York, Free Press.
2. Cowley, Don. Understanding Brands. London, Kogan Page.
3. Czerniawski, Richard D. & Michael W. Maloney Creating Brand Royalty, AMACOM, NY.
4. Kapferer,J N. Strategic Brand Management. New York, Free Press.
5. Murphy, John A. Brand Strategy Cambridge, The Director Books.
6. Steward, P. Building Brands Directly. London, MacMillan.
7. Upshaw, Lyhh B. Building Board Identity: A Strategy for success in a hostile market place. New York, John, Wiley.

The list of cases and specific references including recent articles and reports will be announced in the class at the time of launching of the course.

MBA-PE-M-4: INTEGRATED MARKETING COMMUNICATION

Credit: 3
Total Allotted Hours**: 45 [30-15-0]***

Pre-requisite(s): *Knowledge of fundamentals of Marketing Management*

Objective: The objective of the course is to acquaint the students with essential concepts and techniques for the development and designing of an effective Integrated Marketing Communication programme.

Course Outcome (COs)

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

- CO1: ***Provide*** a base of IMC, its tools and their effectiveness in contemporary time.
- CO2: ***Equip*** with knowledge about the nature, purpose and complex construction in the planning and execution of an effective Integrated Marketing Communication (IMC) program.
- CO3: ***Understand*** the various tools of IMC and the importance of coordinating them for an effective marketing communication program.
- CO4: ***Compare*** between the different elements in IMC and list its use in making a IMC plan for an organization.
- CO5: ***Prepare*** an IMC plan and present it persuasively.
- CO6: ***Recognize*** the impact of marketing communication on society at large.

Course Contents

Module-1

An introduction to Integrated Marketing Communication (IMC): Meaning, features & evolution, Role of IMC in marketing process, One voice communication v/s IMC, Introduction to IMC tools, IMC Planning Process/Model, Role of Advertising Agencies and other marketing organizations providing marketing Services and perspectives on consumer behaviour. Current trends in IMC. **[4-2-0]***

Module-2

Understanding Communication Process: Basic model of communication, AIDA, Hierarchy of effect model, Innovation adoption model, Information processing model, ELM and FCB model. **[6-3-0]***

Module-3

Planning for Marketing Communication (Marcom): Determining IMC objectives, Marketing v/s sales v/s communication objectives, DAGMAR, Problems in setting objectives, Budget approaches for promotion communication. **[4-2-0]***

Module-4

Elements of Integrated Marketing Communication: Advertising: meaning, features, evolution, role, classification and special purpose advertising - green advertising, Pro bono advertising, rural advertising. Sales Promotion: meaning, reasons for growth, major techniques at different level - consumer, dealer, sales force. Direct Marketing: meaning, role of direct marketing in IMC, merits & demerits, different techniques. Public Relations and Publicity: PR- meaning, its importance in IMC, merits & demerits, tools of PR. Publicity- meaning, characteristics, importance, sources. Personal Selling: meaning, types of sales persons, skill set required for effective selling. Digital Marketing: meaning, role of digital marketing in IMC, merits & demerits, different techniques. **[6-3-0]***

Module-5

Developing the Integrated Marketing Communication Programme: Designing an effective message, Creative options and formats, Promotion appeals, Creative stages, Evaluating media options, Merging media & creative strategy. **[4-2-0]***

Module-6

Ethics and Evaluation in Marketing Communication: Unethical practices in marketing communication. Social and cultural consequences, Evaluation process of IMC, Advertising effectiveness - post tests, copy testing – emotional reaction test, cognitive neuroscience – online evaluation, Behavioural evaluation – sales and response rate, POPAI, toll free numbers, QR codes and facebook likes response cards, internet responses redemption rate. Measuring effectiveness of sales promotion, non-traditional media, personal selling, and other IMC program elements. **[6-3-0]***

***L-T-P**

Programme Outcomes (POs), Course Outcomes (COs) and Modules Mapping

Sl.	Programme Outcomes	Course Outcomes	Modules
1.	PO1, PO2 & PO4	CO1	M1
2.	PO1, PO2, PO3, & PO4	CO2	M2
3.	PO1, PO2, PO3 & PO4	CO2	M3
4.	PO2, PO3, & PO4	CO3 & CO4	M4
5.	PO2, PO3, PO4 & PO5	CO5	M5
6.	PO1, PO2 & PO3	CO6	M6

Suggested Readings

1. Belch George E., and Belch Michael A. Advertising and Promotion: An Integrated Marketing Communications Perspective. Tata McGraw Hill
2. Jethwaney Jaishri & Jain. Shruti Advertising Management. Oxford University Press
3. Shah Kruti and D’Souza Allan. Advertising & Promotions: An IMC perspective. Tata McGraw Hill
4. Aakar, Batra and Myers. Advertising Management. Prentice
5. Kazmi S H and Batra. Advertising & Promotions. Excel
6. Wells, Moriarty and Burnett. Advertising; Principles and Practice. Pearson
7. Terence A. Shimp Pub. Advertising & Promotion: An IMC approach. Cengage Learning

8. Clow, K.E., & Baack, D. Integrated advertising, promotion and marketing communication Dorling Kindersley India Pvt Ltd
9. Gopalakrishnan, P S. Integrated Marketing Communication: Concepts and Cases. ICFAI University Press
10. Dutta, Kirti. Integrated Marketing Communication. Oxford University Press

The list of cases and specific references including recent articles and reports will be announced in the class at the time of launching of the course.

MBA-PE-M-5: FINANCIAL SERVICES MARKETING

Credit: **3**
Total Allotted Hours:**45 [30-15-0] ***

Pre-requisite(s): *Knowledge of fundamentals of Marketing Management and Financial Systems*

Objective: To acquaint the student with the field of financial services and to provide an in-depth knowledge about marketing of various financial services.

Course Outcomes (COs)
Upon successful completion of this course, students will be able to:

- **CO1:** Understand the Financial Landscape
- **CO2:** Develop Customer-centric Strategies
- **CO3:** Apply the marketing mix of financial services
- **CO4:** Leverage digital and technological tools
- **CO5:** Navigate Ethics and Regulations

Course Contents

Module-1
Fundamentals of Financial Services: Structure of Financial System – role of Financial System in Economic Development – Financial Markets and Financial Instruments – Capital Markets – Money Markets – Primary Market Operations – Secondary Market Operations, Functions of Stock Exchanges Role of non-banking financial companies (NBFCs), Characteristics of financial services. Current market scenario – Indian and global. **[6-3-0]***

Module -2
Financial Products and Services: Banking Products- Retail banking, savings accounts, credit/debit cards, and personal/housing loans. Insurance and Investments: Marketing of life and non-life insurance, mutual funds, and pension funds. De-mat Services-need and Operations-role of NSDL and CSDL. Asset/Fund-Based Financial services - Leasing, Introduction to Equipment Leasing, Financial Evaluation of Leasing. Hire Purchase and Consumer Finance Factoring and Forfeiting, Bill Discounting. **[6 -3-0]***

Module -3
Consumer Behaviour in Financial Services: Consumer Decision-making in Financial Services, Factors Influencing Consumer Decisions, Risk Perception, Trust and Credibility in Financial Services, Customer Segmentation and Targeting, Differentiation and Positioning of Financial Service. **[6 -3- 0]***

Module -4

Marketing Financial Services to Different Segments: Retail Banking Customers, High Net-Worth Individuals (HNIs), SMEs and Corporate Clients, Millennials and Gen Z, Financially Excluded and Underbanked Popularity. **[4 -2-0]***

Module - 5

Marketing Mix and Strategy: Product **-** Customization and Personalization of financial services, Role of Technology in Service Design, Value Proposition Creation, building trust through branding, Brand loyalty and customer retention. Price and Place**:** Pricing strategies. Multiple delivery channels, ATMs, impact of FinTech, UPI, Internet/mobile banking, and AI-driven marketing in shaping distribution strategy, Bancassurance. Promotion and People **-** Sales force management, direct marketing, and public relations. **[5 -3- 0]***

Module – 6

Regulatory Aspects and Ethical Considerations: Compliance – Regulations governing financial services (e.g., SEBI guidelines for mutual funds, IRDAI for insurance). Ethics **–** Consumer data protection, transparency in pricing, and service quality. **[3-1-0]***

***L-T-P**

Programme Outcomes (POs), Course Outcomes (COs) and Modules Mapping

Sl.	**Programme Outcomes**	**Course Outcomes**	**Modules**
1.	PO1, PO2 & PO4	CO1	MI
2.	PO1, PO2, PO3, & PO5	CO1 & CO3	M2
3.	PO2 & PO5	CO2 & CO3	M3
4.	PO1 & PO2	CO1	M4
5	PO1, PO2, PO3, & PO5	CO2, CO3 & CO4	M5
6.	PO1, PO3, PO4 & PO5	CO4	M6

Suggested Readings

1. Financial Markets and Services – K. Natarajan and E. Gordon, Himalaya Publishing House, 11th Edition
2. Managing and Marketing of Financial Services – N.K. Gupta, Taxman Publications
3. Financial Markets and Institutions – S. Guruswami, Tata McGraw Hill Education, New Delhi
4. Marketing of Financial Services – V.A. Avadhani, Himalaya Publishing House, 11th Edition
5. Financial Services – M.Y. Khan, McGraw Hill, 10th Edition.

The list of cases and specific references including recent articles and reports will be announced in the class at the time of launching of the course.

MBA-PE-M-6: RETAIL MARKETING

Credit: **3**
Total Allotted Hours: **45 [30-15-0]***

Pre-requisites(s): *Knowledge of fundamentals of Retailing*

Objective: To equip students with end-to-end knowledge of the retail industry, strategies to connect with consumers, to manage merchandise and optimize the retail mix.

Course Outcomes (COs)
Upon successful completion of this course, students will be able to:

- **CO1:** Understand the concepts, evolution, and environment of retailing.
  and consumer purchase behaviour in retail contexts.
- **CO2:** Apply retail planning techniques including location, merchandising, and category management.
- **CO3:** Evaluate retail mix and retail operations
- **CO4:** Develop retail strategies including franchising and customer relationship management.
- **CO5:** Assess the role of technology and emerging challenges in retail business.

Course Contents

Module-1

Basics of Retailing: Retail Concepts – Definitions, functions, and the scope of the retail industry. Retail Environment – Global and Indian retail evolution. Retail Formats – Types of retailers including supermarkets, department stores, hypermarkets, and franchises; MNC's role in designing organized retail format. Consumer Behaviour – Understanding the retail shopper, demographic analysis, and decision-making process. CRM in Retailing. Retail Environment.
[6 -3-0]*

Module-2

Retail Strategy and Location: Retail Strategy – Target Market Selection, Market positioning, and Strategies. Store Location – Factors affecting site selection, trading area analysis, and evaluating store locations; Store Design and Layout – Optimizing space, customer traffic flow, and retail image. Visual Merchandising – Store exteriors, window displays, colour blocking, and signage. **[8-3-0]***

Module-3

Merchandise Management and Pricing: Merchandise Planning – The merchandise budget, assortment planning, and procurement methods. Category Management – Defining categories and evaluating merchandise performance. Retail Pricing – Strategies (Everyday Low Pricing, price skimming, psychological pricing). **[6 -3-0]***

Module 4:

Retail Promotion and Supply Chain Management: Retail Communication Mix – Advertising, Public Relations, and Sales promotions. Channel flows, Growth of channel relationship and partnership, Retail logistics, Corporate replenishment policies. **[6 -3-0]***

Module 5:

Retail Technology and E-Retailing: Retail Information Systems (RIS) –Point of Sale (POS) systems, data warehousing, and inventory tracking. E-Commerce and Omnichannel Retailing – Integration of online and offline retail, online consumer behaviour, and m-commerce. Future Trends – Role of AI, Smart Cards, self-checkout kiosks, and augmented reality in retail.
[4-3-0]*

***L-T-P**

Programme Outcomes (POs), Course Outcomes (COs) and Modules Mapping

Sl.	Programme Outcomes	Course Outcomes	Modules
1.	PO1& PO4	CO1 & CO4	MI
2.	PO1, PO2 & PO3	Co2 & CO4	M2
3.	PO1, PO2 & PO3	CO3	M3
4.	PO1, PO2 & PO5	CO3	M4
5	PO2, PO4 & PO5	CO4 & CO5	M5

Suggested Readings

1. Diamond Allen.Fashion Retailing. Demar Pub.
2. Diamond, Jay and Gerald Pintel Retailing Prentice-Hall. NJ.
3. Drake. Mary Francis. J H.Spooneano H Greenwald Retail Fashion. Promotion. and Advertising MacmillanNY.
4. Levy. Michael & Barton *A.* Weitz Retailing Management. 2ndedIrwin. London.
5. Morgenstein, Melvin and Harrow Strong - Modern Retailing Prentivce-Hall. NJ.

The list of cases and specific references including recent articles and reports will be announced in the class at the time of launching of the course.

MBA-PE-M-7: SERVICE MARKETING

Credit: 3
Total Allotted Hours**: 45 [30-15-0]***

Pre-requisite(s): *Knowledge of fundamentals of Marketing Management*

Objective
To enable students to examine, quantify, and assess several aspects of services marketing that are critical to a service sector company's performance.

Course Outcome (COs)

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

- **CO1**: Understand the distinctive features of services and key elements in service marketing.
- **CO2**: Create compelling customer value propositions using the core and supplementary elements.
- **CO3**: Design innovative service offerings and structural frameworks to ensure smooth service delivery and operational efficiency.
- **CO4**: Identify, measure, and close service gaps to enhance overall customer satisfaction.
- **CO5**: Manage service expectations and reduce perceived risk.

Course Contents

Module-1

Introduction: Services - Definition, distinctive characteristics, Difference between goods & services, Need and scope of service marketing, Reasons for growth of services, Tangibility continuum, Different types of service sectors, Service marketing mix. **[4-2-0]***

Module-2

Creating the Service Product: Service product, Customer value hierarchy, Flower of service, Service product mix, Branding service products. Service Life Cycle, New Service Development, Service Blueprinting. **[4-2-0]***

Module-3

GAP Model of Service Quality: Service quality, Zone of tolerance, Service quality Gap Model, Service quality dimensions, Measuring service quality-SERVQUAL. **[4-2-0]***

Module-4

Understanding Customer Requirements: Listening to customers through research, Moment of truth, Building customer relationship, Service recovery, Factors necessary for appropriate service standards. Managing Demand and Capacity – Capacity constraints, Demand patterns, Strategies for matching capacity and demand, Wait lines and reservations**. [6-3-0]***

Module-5

Pricing and Distribution of Services: Service pricing – Nature of service prices, Approaches to pricing, Pricing strategies that link to the four value dimensions. Distributing Services – Distribution in service context, Direct channels, Franchising, Agents and Brokers, Electronic channels, Strategies for effective delivery. **[4-2-0]***

Module-6

Physical Evidence and the Servicescape: Concept of physical evidence, Types of servicescapes, Strategic roles of servicescapes, Guidelines for physical evidence strategy.
[4-2-0]*

Module-7

Employees and Customers Role in Service Delivery: Service culture, Service triangle, Importance of service employees in service delivery, Importance of service customers in service delivery. **[4-2-0]***

***L-T-P**

Programme Outcomes (POs), Course Outcomes (COs) and Modules Mapping

Sl.	Programme Outcomes	Course Outcomes	Modules
1.	PO1, PO2, & PO4	CO1	MI
2.	PO1, PO2, PO3, PO4, & PO5	CO2 &CO3	M2
3.	PO1, PO2, PO3, PO4, & PO5	CO4& CO5	M3
4	PO1, PO2, PO3 & PO5	CO2 & CO4	M4
5	PO1, PO2 & PO3	CO5	M5
6	PO1, PO2, PO4, & PO5	CO5	M6
7	PO1, PO3, & PO5	CO5	M7

Suggested Readings

1. Lovelock, Christopher H., Managing Services: Marketing Operations and Human Resources. Englewood Cliffs, New Jersey, Prentice Hall Inc.
2. Lovelock, Christopher H., Services Marketing Englewood Cliffs, New Jersey, Prentice Hall Inc.
3. McGonald, Malcom and Payne, A., Marketing Planning for Services. Butterworth, Heinemann.
4. Newton M P Payne, A., The Essence of Services Marketing. New Delhi, Prentice Hall of India.
5. Verma, H V., Marketing of Services. New Delhi, Global Business Press.
6. Zeithaml, V A and Bitner, M J. Services Marketing. New York, McGraw Hill.

7. Zeithaml, Valarie A., Mary Jo Bitner, and Dwayne D. Gremler, Services marketing: Integrating customer focus across the firm., TMH
8. Bhattacharjee, C., Services marketing: concepts, planning and implementation, Excel books.
9. Nargundkar, R., Services Marketing – Text and Cases, The McGraw-Hill Companies.
10. Hoffman, K. D., Hoffman, K. D., & Bateson, J. E., Marketing of services, Cengage Learning.
11. Bhattacharjee, C., Service sector management: An Indian perspective, Jaico Publishing House.
12. Srinivasan, R., Services marketing: the Indian context. PHI Learning Pvt. Ltd.

The list of cases and specific references including recent articles and reports will be announced in the class at the time of launching of the course

MBA-PE-M-8: INDUSTRIAL MARKETING

Credit: **3**
Total Allotted Hours: **45 [30-15-0] ***

Pre-requisite(s): *Knowledge of fundamentals of Organizational Buying*

Objective: The objective of this course is to lay a foundation for an understanding of the complex dimensions of the industrial marketing.

Course Outcomes (COs)
Upon successful completion of this course, students will be able to:
- **CO1:** Understand the unique features and influencing environmental factors of industrial markets.
- **CO2:** Analyze the organizational buying process, the buying center, and purchasing system.
- **CO3:** Apply analytical tools to segment industrial markets and manage vendor relationships.
- **CO4:** Develop actionable strategies for the Industrial Marketing Mix.

Course Contents

Module - 1

Introduction to Industrial Marketing: Industrial Marketing vs. Consumer Marketing, Derived demand, fluctuating demand, and cross-elasticity. Classification of Industrial Customers. Macro and Micro variables for affecting Industrial Markets; Industrial market segmentation, targeting, and positioning (STP). Industrial Marketing Strategy in India. Uncertainty Management in Industrial Marketing. **[6-3-0]***

Module - 2

Types of Industrial Products and Industrial Product Decisions: Major Equipment; Accessory Equipment; Raw and Processed Materials; Component Parts and Sub-Assemblies: Operating Supplies; Standardized and Non-Standardized Parts, Industrial Services. Industrial Product Life Cycle, Industrial Product Mix determinants viz. technology – competition - operating capacity – shift in location of customers, government controls – changes in level of business activity. **[4-3-0]***

Module -3

Industrial Buying Behaviour: Buying Center concept, Buying Roles; Environmental & Organizational Influences. The Buy Grid Model; Organizational Buying Decision Process, Industrial Buying Behaviour in Indian context, Stages in Buying. **[4-2-0]***

Module - 4

Channel Structure for Industrial Products: Geographical, size, operating characteristics, manufacturers' and sales agents, Broker. Channel Logistics, Physical Distribution and Customer Services. **[4-2-0]***

Module -5

Pricing for Industrial Products: Pricing Objectives, Price Decision Analysis – Breakeven analysis – net pricing – discount pricing – trade discounts – geographic pricing – factory pricing – freight allowance pricing, Terms of Sale, Outright purchase, Hire-purchase, Leasing. Negotiation in Industrial Marketing. **[4-2-0]***

Module -6

Purchasing Systems: Characteristics of Organizational Procurement; Purchasing in Government Units Auctions, Documentation, bids, order placement, follow up, receipt and inspection. **[4-2-0]***

Module -7

Promotion for Industrial products: Supporting salesmen, Motivating distributors, Stimulating primary demand, Sales appeal. Publicity and sponsorships. Trade-shows – exhibits – Catalogs – Samples – promotional letters – Promotional novelties. **[4-1-0]***

*** L-T-P**

Programme Outcomes (POs), Course Outcomes (COs) and Modules Mapping

Sl.	Programme Outcomes	Course Outcomes	Modules
1.	PO1 & PO4	CO1 & CO3	M1
2.	PO1, PO2 & PO3	CO2 & CO4	M2
3.	PO1 , PO2, PO3	CO3	M3
4.	PO1, PO3 & PO5	CO4	M4
5	PO1 , PO2 & PO5	CO4	M5
6.	PO1 & PO2	CO3	M6
7.	PO1 & PO2	CO4	M7

Suggested Readings

1. Industrial Marketing; Cases and Concepts. Corey, E Raymond 3rd ed. Englewood Cliffs, New Jersey, Prentice Hall Inc.
2. Industrial Marketing 2e by K. K. Havaldar, Publisher: Tata McGraw-Hill Publishing Company limited
3. Industrial Marketing Management M. Govindarajan, Publisher: Vikas Publishing House Pvt Ltd
4. Industrial Marketing: Analysis, Planning and Control. Reeder, Robert R etc Englewood Cliffs, New Jersey, Prentice hall Inc.
5. Industrial Marketing Strategy. Webster, F E., 2nd ed. New York, John Wiley.

The list of cases and specific references including recent articles and reports will be announced in the class at the time of launching of the course.

MBA-PE-M -9: GLOBAL MARKETING

Credit: **3**
Total Allotted Hours: **45 [30-15-0]***

Pre-requisite(s): *Knowledge of fundamentals of Marketing management and Global Business Environment*

Objective: To acquaint the students with environmental, procedural, institutional and decisional aspects of global marketing.

Course Outcomes (COs)
Upon successful completion of this course, students will be able to:

- **CO1:** Know global marketing concepts and assess how environmental factors impact international trade.
- **CO2:** Design appropriate global market entry and expansion strategies.
- **CO3:** Formulate marketing mix (4Ps) strategies for international markets.
- **CO4:** Understand global trade regulations.

Course Contents

Module-1

Introduction to Global Marketing – Definition and Concept, Various Forms of International Business, Distinctions between global and domestic marketing. Reasons for global marketing. EPRG Framework. Global Marketing Environment – Economic environment, Cultural environment, Political environment, and Commercial Environment. Role of WTO, regional economic integration, and trade barriers. **[8-3-0]***

Module - 2

Global Market Entry and Research – International market selection, market research, and segmentation. Entry modes: Exporting, licensing, franchising, joint ventures, and FDI.
[5-3-0] *

Module - 3

Global Product and Pricing - Product adaptation and standardization, International Product Life cycle, Role of Packaging. Role of price and non-price factors in international marketing, Pricing strategies. **[5 -2-0] ***

Module - 4

Overseas Distribution System – Direct and Indirect Exporting, Factors affecting overseas channel decision, Channel Strategy. **[3- 2-0]***

Module-5

Global Promotion of Products – Issues and Challenges, merits and demerits of standardized global advertising theme. Importance of Stores Promotion, Trade fairs and Exhibitions. Export Promotion in India – Need for export assistance and steps taken by Indian Government, Institutional infrastructure: Export Promotion Councils, ECGC, and Commodity Boards. EPZ, FTZ, SEZ. **[5-3-0]***

Module-6

Export Documents and Procedure – Role of export documents, Some important export documents: Certificate of origin, Commercial Invoice cum Packing List, Bill of Lading, Bills of Exchange, Foreign Exchange Control Form, Letter of Credit. Incoterms. **[4-2-0]***

*L-T-P

Programme Outcomes (POs), Course Outcomes (COs) and Modules Mapping

Sl.	Programme Outcomes	Course Outcomes	Modules
1.	PO1,PO2 & PO4	CO1 & CO4	MI
2.	PO2, PO3 & PO4	CO2 & CO4	M2
3.	PO1, PO2 & PO4	CO3	M3
4.	PO1, PO2 & PO4	CO3	M4
5	PO1,PO2, PO4 & PO5	CO3 & CO4	M5
6	PO3, PO4 & PO5	CO4	M6

Suggested Readings

1. Keegan, Warren. Global Marketing Management. Englewood Cliffs, New Jersey, Prentice Hall Inc.
2. Onkvisit, Sak and Shaw, J.J. International Marketing: Analysis and Strategy. New Delhi, Prentice Hall of India.
3. Terpstra, Vern and Sarathy, R. International Marketing. Orlando, Dryden Press.
4. Bhattacharya, B. Export Marketing: Strategies for Success, New Delhi, Global Business Press.
5. Walter, I and Murray, T. Handbook of International Business. New York, John Wiley.

The list of cases and specific references including recent articles and reports will be announced in the class at the time of launching of the course.

MBA-PE-M -10: RURAL MARKETING

Credit: **3**
Total Allotted Hours: **45 [30-15-0]***

Pre-requisites(s): *none*

Objective: To expose students to the rural market environment and enable them to understand the unique characteristics, opportunities, and challenges associated with marketing in rural areas.

Course Outcomes (COs)
Upon successful completion of this course, students will be able to:

- **CO1:** Gain conceptual knowledge of rural markets and behaviour of rural consumers.
- **CO2:** Understand the applicability of the concepts, techniques and processes of marketing in rural markets.
- **CO3:** Evaluate the emerging trends of rural marketing
- **CO4:** Analyse the problems of rural marketing and the workings of rural marketing institutions,

Course Contents

Module-1

Introduction to Rural Marketing: Meaning, nature and scope of rural marketing in India; Rural versus urban markets; Classification of Indian rural markets; Rural marketing environment; Opportunities and challenges in rural marketing. ICT and digital marketing practices in rural areas of India; E-commerce and Indian rural markets. **[8-3-0]***

Module-2

Rural Consumer Behaviour: Profile of the rural consumer, literacy levels, occupation, and income streams. Factors influencing rural buying behaviour - The role of opinion leaders, family structure, SHGs and community networks. Rural consumer decision-making process; Opinion leadership and diffusion of innovation in rural markets. **[6-3-0]***

Module-3

Rural Market Segmentation and Research: Segmentation, targeting and positioning in rural markets; Rural marketing research; Data collection methods; Participatory Rural Appraisal (PRA); Rural market potential assessment. **[6-3-0]***

Module-4

Rural Marketing Mix: Product **-** Classification, new product development, branding, and packaging for rural sensitivities. Price – Value-based pricing, psychological pricing, and seasonal pricing aligned with crop harvests. Place – Rural logistics, supply chain challenges, haats/shandies, and cooperative marketing models. Promotion **-** Integrated Marketing Communication for rural areas, folk media, melas, and direct marketing. **[6-3-0]***

Module-5

Agricultural Marketing and Institutional Supports: Agricultural produce, marketable surplus, and supply chain of agricultural inputs. Role of government and cooperative bodies like NAFED, APEDA, and CACP. Cooperative marketing, Micro credit marketing, Public Private Partnership model in rural marketing. **[4-3-0]***

***L-T-P**

Programme Outcomes (POs), Course Outcomes (COs) and Modules Mapping

Sl.	Programme Outcomes	Course Outcomes	Modules
1.	PO1, PO2 & PO4	CO1 & CO3	MI
2.	PO1, PO2 & PO5	CO1 & CO3	M2
3.	PO2 & PO3	CO1 & CO2	M3
4.	PO1, PO2 & PO3	CO2	M4
5	PO1, PO2, PO4 & PO5	CO2, CO3 & CO4	M5

Suggested Readings

1. Rural Marketing - R V Badi, N V Badi- HPH, 2/e, 2005
2. Rural Marketing - T P Gopalaswamy- Vikas Publishing House
3. The Rural Marketing Text Book- Pradeep Kashyap, Siddhartha Rant- Biztantra 2005
4. Rural Marketing- Habeeb Ur Rahaman- HPH, 1/e, 2004
5. Rural Marketing- Text and cases- S.L. Gupta, Wisdom Publication
6. Rural Marketing- Text and cases- U.C Mathur, Excel Books

The list of cases and specific references including recent articles and reports will be announced in the class at the time of launching of the course.

MBA-PE-HR -1: HUMAN RESOURCE PLANNING
Credit: **3**
Total Allotted Hours: **45 [30-15-0]***
Pre-requisite(s): *Human Resource Management (Semester 2)*

Objectives
The course develops strategic competencies in forecasting, planning, acquiring, deploying and retaining human resources. It emphasizes strategic workforce planning, HR analytics, competency mapping, succession planning, talent management, and digital HR aligned with organizational strategy.
Course Outcomes

- **CO1**: Explain the concepts, objectives, models and strategic significance of Human Resource Planning.
- **CO2:** Apply quantitative and qualitative HR forecasting techniques for workforce demand and supply.
- **CO3:** Design workforce planning, competency mapping, succession planning and talent acquisition strategies.
- **CO4:** Evaluate HR metrics, workforce analytics and legal-ethical issues for evidence-based decisions.
- **CO5:** Develop strategic workforce plans addressing globalization, digital transformation and sustainability.

Course Contents
Module-1: Foundations of HR Planning: Nature, scope, objectives, SHRP, environmental scanning, workforce planning models, HRP process and business strategy. Concept and Methods– Job Description, Job Specification. **[6 – 3 – 0]***
Module-2: HR Forecasting: Demand and supply forecasting, skills inventory, replacement charts, Markov analysis, HRIS, workforce analytics and gap analysis. Matching HR Requirement and Availability – Issues of shortage and surplus. **[6 – 3 – 0]***
Module-3: Talent Planning: Competency mapping, recruitment planning, employer branding, succession planning, career planning, retention and knowledge management. **[6 – 3 – 0]***
Module-4: HR Analytics: HR scorecard, dashboards, productivity, turnover, predictive analytics, AI in HR, diversity, legal and ethical issues. **[6 – 3 – 0]***
Module-5: Emerging Issues: Global workforce planning, Industry 5.0, hybrid workforce, Green HRM, ESG, future skills and strategic workforce planning. **[6 – 3 – 0]***

Programme Outcomes, Course Outcomes (COs) and Modules Mapping

Sl.	Programme Outcomes	Course Outcomes	Modules
1	PO1, PO2, PO3, PO4 & PO5	CO1	M1
2	PO1, PO2, PO4 & PO5	CO1 & CO2	M2
3	PO1, PO2, PO3 & PO5	CO1 & CO3	M3
4	PO1, PO2, PO3 & PO4	CO1 & CO4	M4
5	PO1, PO2, PO3 & PO4	CO1 & CO5	M5

Suggested Readings

1. Gary Dessler – Human Resource Management (Pearson).
2. Michael Armstrong & Stephen Taylor – Armstrong's Handbook of Human Resource Management Practice (Kogan Page).
3. Jeffrey A. Mello – Strategic Human Resource Management (Cengage).
4. K. Aswathappa – Human Resource Management: Text and Cases (McGraw-Hill).
5. Luis R. Gomez-Mejia, David B. Balkin & Robert L. Cardy – Managing Human Resources (Pearson).
6. T.V. Rao – HRD Audit (Sage).
7. P. Jyothi & D.N. Venkatesh – Human Resource Management (Oxford University Press).

The list of cases and specific references including recent articles and reports will be announced in the class at the time of launching of the course.

MBA-PE-HR-2: HUMAN RESOURCE DEVELOPMENT
Credit: **3**
Total Allotted Hours: **45 [30-15-0]***
Pre-requisite(s): *Human Resource Management (Semester 2)*

Objectives
Understand theories, systems, and practices of Human Resource Development (HRD). Develop capability to design learning, leadership and career development interventions. Apply competency-based HRD and talent development tools. Evaluate HRD effectiveness using analytics and evidence. Promote ethical, inclusive, and globally relevant HRD practices.
Course Outcomes

- **CO1**: Explain HRD concepts, theories, and strategic role in organizational development (Understand).
- **CO2:** Apply learning, training, and competency frameworks to solve organizational problems (Apply).
- **CO3:** Analyze leadership, career, and talent development interventions (Analyze).
- **CO4:** Evaluate HRD effectiveness using metrics, ROI and analytics while considering ethics (Evaluate).
- **CO5:** Design integrated HRD strategies for innovation, employee well-being, and global competitiveness (Create).

Course Contents
Module-1
Foundations of HRD: Concept, Objectives and Approaches–HRD Framework & Techniques, Different HRD Systems, evolution of HRD systems, adult learning, learning organization. **[6 – 3 – 0]***

Module-2
Training & Learning: Aligning Training with strategy, Training Needs Analysis Approaches, Training process, Training delivery methods, digital learning, Training evaluation. Training budget. **[6 – 3 – 0]***

Module-3
Leadership, Career & Talent Development: Approaches and techniques of Management Development: coaching, mentoring, succession, competency mapping, talent management. Management Development Implications. **[6 – 3 – 0]***

Module-4
Performance, Engagement & HRD Analytics: PM linkage, employee engagement, ROI, HR scorecard, analytics. HRD non training methods: Counselling: Concept, Types and Process—Quality of Work Life: Concept, Advantages and Barriers, Career Planning and Management: Issues and Imperatives. **[6 – 3 – 0]***

Module-5
Contemporary HRD: OD interventions, change, DEI, well-being, future skills, AI-enabled learning, global HRD. **[6 – 3 – 0]***
***L-T-P**

Programme Outcomes, Course Outcomes and Module Mapping

Sl.	Programme Outcomes	Course Outcomes	Module
1	PO1, PO2, PO3 & PO5	CO1	M1
2	PO1, PO2, PO3 & PO5	CO2	M2
3	PO1, PO2, PO3, PO4 & PO5	CO3	M3
4	PO1, PO2, PO3 & PO4	CO4	M4
5	PO1, PO2, PO3, PO4 & PO5	CO5	M5

Suggested Readings

1. Jon M. Werner & Randy L. DeSimone – Human Resource Development.
2. T.V. Rao – Readings in Human Resource Development.
3. Udai Pareek & T.V. Rao – Designing and Managing Human Resource Systems.
4. Richard A. Swanson & Elwood F. Holton III – Foundations of Human Resource Development.
5. Rolf P. Lynton & Udai Pareek – Training for Development.
6. Raymond A. Noe – Employee Training and Development.
7. Gary Dessler – Human Resource Management (HRD chapters).
8. K. Aswathappa – Human Resource and Personnel Management

The list of cases and specific references including recent articles and reports will be announced in the class at the time of launching of the course.

MBA-PE-HR-3: PERFORMANCE MANAGEMENT AND COMPETENCY MANAGEMENT

Credit: **3**

Total Allotted Hours: **45 [30-15-0]***

Pre-requisite(s): *Human Resource Management (Semester 2)*

Objectives

The objective of this course is to provide students with a comprehensive understanding of contemporary Performance Management Systems (PMS) and Competency Management frameworks that support strategic organizational objectives. The course focuses on designing performance-driven organizations through effective goal setting, competency mapping, continuous performance management, employee development, succession planning, HR analytics, and digital performance systems. It also equips students with analytical and leadership competencies required for managing performance in dynamic, technology-enabled, and globally competitive business environments.

Course Outcomes (COs)

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

- **CO1**: Explain the concepts, principles, and strategic role of Performance Management and Competency Management in achieving organizational effectiveness.
- **CO2:** Apply contemporary performance planning, appraisal, coaching, feedback, and competency mapping techniques to improve individual and organizational performance.
- **CO3: A**nalyze performance data, competency frameworks, and talent review processes to support evidence-based HR decision-making.
- **CO4:** Evaluate performance management interventions, competency assessment methods, and succession planning practices from ethical, legal, and strategic perspectives.
- **CO5:** Design integrated performance and competency management systems incorporating HR analytics, digital technologies, continuous feedback, and future workforce requirements.

Course Contents

Module-1

Strategic Performance Management: Concept, objectives and evolution of Performance Management; Performance Management versus Performance Appraisal; Strategic alignment of PMS; Performance Management Cycle; Characteristics of High-Performance Organizations; Role of Managers and Employees in Performance Management; Ethics in Performance Evaluation. **[4 – 2 – 0]***

Module-2

Performance Planning and Goal Setting: Strategic objectives; Cascading organizational goals; SMART Goals; Management by Objectives (MBO); Key Result Areas (KRAs); Key Performance Indicators (KPIs); Objectives and Key Results (OKRs); Performance Contracts; Balanced Scorecard; Performance Planning Meetings. Tutorial: Designing KPIs and Balanced Scorecards using industry cases. **[5 – 2 – 0]***

Module-3

Performance Review and Development: Continuous Performance Management; Performance Coaching; Performance Counselling; Feedback Systems; 360-degree Feedback; Behaviourally Anchored Rating Scale (BARS); Critical Incident Method; Performance Review Meetings; Managing Poor Performance; Individual Development Plans (IDPs). Tutorial: Performance appraisal role plays and coaching simulations. **[5 – 3 – 0]***

Module-4

Competency Management: Concept and types of competencies; Behavioural, Functional, Technical and Leadership Competencies; Competency Mapping Process; Competency Dictionary; Competency Models; Competency Gap Analysis; Assessment Centers; Development Centres; Potential Appraisal; Career and Succession Planning. Tutorial: Developing competency frameworks and competency mapping exercises. **[5 – 3 – 0]***

Module-5

Talent Management and Performance Analytics: High-Potential Identification (HiPos); Talent Reviews; Nine-Box Grid; Succession Planning; Learning Agility; Employee Development; HR Analytics for Performance Management; Predictive Analytics; AI-enabled Performance Systems; Digital PMS Platforms; Employee Experience; Future of Performance Management. Tutorial: HR Analytics case study and dashboard interpretation. **[5 – 3 – 0]***

Module-6

Emerging Trends in Performance and Competency Management: Agile Performance Management; Remote and Hybrid Performance Management; Diversity, Equity & Inclusion (DEI); Employee Well-being; Psychological Safety; ESG-linked Performance Metrics; Ethical Issues in Performance Evaluation; Global Performance Management Practices. Tutorial: Harvard/XLRI-style case discussion and research presentation. **[6 – 2 – 0]***

***L-T-P**

Programme Outcomes, Course Outcomes (COs) and Modules Mapping

Sl.	Programme Outcomes	Course Outcomes	Modules
1	PO1, PO2, PO3 & PO5	CO1	M1
2	PO1, PO2 & PO4	CO1 & CO2	M2
3	PO1, PO2, PO3 & PO5	CO2 & CO3	M3
4	PO1, PO2, PO3 & PO4	CO3 & CO4	M4
5	PO1, PO2, PO3, PO4 & PO5	CO4 & CO5	M5 & M6

Suggested Readings

1. Herman Aguinis, Performance Management, Pearson.
2. Michael Armstrong, Armstrong's Handbook of Performance Management, Kogan Page.
3. Michael Armstrong & Angela Baron, Managing Performance.
4. Lyle M. Spencer & Signe M. Spencer, Competence at Work: Models for Superior Performance, Wiley.
5. T. V. Rao, Performance Management and Appraisal Systems, Sage Publications.
6. T. V. Rao, Competency Mapping and Assessment Centres, Sage Publications.
7. Richard S. Williams, Performance Management, Cengage Learning.
8. SHRM, Performance Management Toolkit (latest edition).
9. CIPD, Performance Management Factsheets and Good Practice Guides.
10. David Ulrich, Jon Younger, Wayne Brockbank & Mike Ulrich, HR Competencies: Mastery at the Intersection of People and Business, Society for Human Resource Management.

The list of cases and specific references including recent articles and reports will be announced in the class at the time of launching of the course.

MBA-PE-HR-4: COMPENSATION MANAGEMENT
Credit: **3**
Total Allotted Hours: **45 [30-15-0]***
Pre-requisite(s): *Human Resource Management (Semester 2)*

Objectives
The objective of this course is to provide students with a comprehensive understanding of strategic compensation management and total rewards systems in contemporary organizations. The course focuses on the design and administration of equitable, competitive, performance-based, and legally compliant compensation systems aligned with organizational strategy. It also develops analytical capabilities in job evaluation, salary structuring, executive compensation, benefits administration, compensation analytics, and global reward management to support organizational competitiveness and employee engagement.
Course Outcomes (COs)
Upon successful completion of this course, students will be able to:

- **CO1**: Explain the concepts, principles, and strategic significance of compensation management and total rewards in achieving organizational effectiveness.
- **CO2:** Apply job analysis, job evaluation, salary structure design, and compensation administration techniques to develop equitable reward systems.
- **CO3**: Analyze compensation policies, incentive plans, employee benefits, and executive reward systems using analytical and market-based approaches.
- **CO4:** Evaluate compensation strategies considering legal, ethical, global, and organizational perspectives for sustainable human resource management.
- **CO5**: Design competitive compensation and total rewards systems integrating HR analytics, digital technologies, and contemporary compensation practices

Course Contents
Module-1
Introduction to Compensation Management: Nature, objectives and scope of compensation; Strategic compensation; Total Rewards philosophy; Components of compensation; Internal and external equity; Factors influencing compensation decisions; Compensation strategy and organizational performance. **[4 – 2 – 0]***

Module-2
Job Evaluation and Wage Structure: Job analysis; Job description and job specification; Job evaluation methods (ranking, classification, point factor, factor comparison); Wage and salary surveys; Pay grades; Pay ranges; Broad banding; Compensation benchmarking. **[5 – 2 – 0]***

Module-3
Incentives and Performance-based Pay: Individual and group incentive plans; Merit pay; Gainsharing; Profit sharing; Variable pay; Sales incentives; Skill-based pay; Competency-based pay; Executive compensation; Employee Stock Ownership Plans (ESOPs); Recognition and reward systems. **[5 – 3 – 0]***

Module-4
Employee Benefits and Compensation Administration: Statutory and voluntary benefits; Retirement benefits; Provident Fund, Gratuity, ESI and social security; Insurance and health benefits; Flexible benefits; Compensation budgeting; Payroll administration; Compensation communication; Tax implications. **[5 – 3 – 0]***

Module-5

Strategic and Global Compensation: International compensation; Expatriate compensation; Cost-of-living adjustments; Pay equity; Compensation governance; Labour market trends; Compensation during mergers and acquisitions; Diversity, Equity & Inclusion (DEI) in rewards; Ethical issues in compensation. **[5 – 3 – 0]***

Module-6

Contemporary Trends in Compensation Management: Compensation analytics; HR metrics; AI-enabled compensation systems; Digital payroll; Flexible and personalized rewards; Gig economy compensation; ESG-linked rewards; Future of Total Rewards. Tutorial: HR analytics dashboard, compensation benchmarking project and industry case presentation. **[6 – 2 – 0]***

***L-T-P**

Programme Outcomes, Course Outcomes (COs) and Modules Mapping

Sl.	Programme Outcomes	Course Outcomes	Modules
1	PO1, PO2, PO3 & PO5	CO1	M1
2	PO1, PO2 & PO4	CO1 & CO2	M2
3	PO1, PO2, PO3 & PO5	CO2 & CO3	M3
4	PO1, PO2, PO3 & PO4	CO3 & CO4	M4
5	PO1, PO2, PO3, PO4 & PO5	CO4 & CO5	M5 & M6

Suggested Readings

1. Milkovich, G. T., Newman, J. M. & Gerhart, B., Compensation, McGraw-Hill.
2. Michael Armstrong, Armstrong's Handbook of Reward Management Practice, Kogan Page.
3. Richard I. Henderson, Compensation Management in a Knowledge-Based World, Pearson.
4. Joseph J. Martocchio, Strategic Compensation: A Human Resource Management Approach, Pearson.
5. T. V. Rao, Compensation and Reward Management, Sage Publications.
6. WorldatWork, The WorldatWork Handbook of Compensation, Benefits and Total Rewards.
7. SHRM, Compensation and Benefits Toolkit (latest edition).
8. CIPD, Reward Management Factsheets and Good Practice Guides.
9. B. D. Singh, Compensation and Reward Management, Excel Books.
10. P. Subba Rao, Personnel and Human Resource Management, Himalaya Publishing House.

The list of cases and specific references including recent articles and reports will be announced in the class at the time of launching of the course.

MBA-PE-HR-5: INDUSTRIAL RELATIONS
Credit: **3**
Total Allotted Hours: **45 [30-15-0]***
Pre-requisite(s): *Human Resource Management (Semester 2)*

Objectives
The objective of this course is to develop a comprehensive understanding of Industrial Relations (IR) as a strategic function that promotes harmonious employer–employee relationships and organizational effectiveness. The course focuses on the evolution of industrial relations, trade unionism, collective bargaining, industrial disputes, grievance management, labour administration, worker participation, and the impact of contemporary labour reforms, globalization, and technological changes on employment relations. The course also equips students with analytical, negotiation, leadership, and conflict-resolution skills required for managing workplace relations in dynamic business environments.

Course Outcomes (COs)
Upon successful completion of this course, students will be able to:

- **CO1:** Explain the concepts, theories, institutions, and legal framework governing Industrial Relations in India and globally.
- **CO2:** Apply principles of collective bargaining, grievance handling, negotiation, and employee participation for maintaining harmonious industrial relations.
- **CO3**: Analyse industrial disputes, trade union strategies, labour policies, and employee relations issues using managerial and analytical approaches.
- **CO4:** Evaluate industrial relations practices, labour reforms, dispute resolution mechanisms, and ethical responsibilities in contemporary organizations.
- **CO5:** Design effective employee relations strategies integrating labour laws, conflict management, social dialogue, and emerging workplace practices.

Course Contents

Module-1

Foundations of Industrial Relations: Concept, scope and objectives of Industrial Relations; Evolution of Industrial Relations in India; Systems and Theories of Industrial Relations (Dunlop, Marxist, Gandhian and Human Relations perspectives); Role of employers, employees, trade unions and government; Industrial Relations climate and productivity**. [5 – 2 – 0]***

Module-2
Trade Unions and Collective Bargaining: Growth and structure of trade unions in India; Functions and recognition of trade unions; Collective bargaining process; Types and levels of bargaining; Negotiation strategies; Worker participation in management; Bipartite and tripartite forums. Tutorial: Collective bargaining simulation and negotiation role play. **[5 – 3 – 0]***

Module-3
Industrial Disputes and Grievance Management: Causes and consequences of industrial disputes; Strikes, lockouts, lay-offs, retrenchment and closure; Grievance handling procedures; Discipline management; Domestic enquiry; Alternative dispute resolution; Conciliation, mediation, arbitration and adjudication. Tutorial: Case analysis on industrial disputes and grievance redressal. **[5 – 3 – 0]***

Module-4
Labour Administration and Labour Codes: Labour administration in India; Role of Ministry of Labour, ILO and regulatory agencies; Occupational safety and health; Social security; Overview of Industrial Relations Code, Code on Wages, Social Security Code and Occupational Safety, Health and Working Conditions Code. Tutorial: Labour Code interpretation and policy discussion. **[5 – 2 – 0]***

Module-5
Strategic Employee Relations: Employee engagement; High-performance work systems; Ethical employment relations; Diversity and inclusion; Managing contract labour, gig workers and remote workforce; Industrial Relations in multinational corporations; International Labor Standards; HR analytics for employee relations. Tutorial: Employee relations dashboard and HR analytics exercise. **[5 – 3 – 0]***

Module-6
Contemporary Issues in Industrial Relations: Digital transformation and Industry 4.0; Future of work; AI and employment relations; Industrial democracy; Sustainable employment relations; Corporate social responsibility and labour welfare; Emerging challenges in employee relations. Tutorial: Harvard/ILO case discussion and group presentation. **[5 – 2 – 0]***
***L-T-P**

Programme Outcomes, Course Outcomes (COs) and Modules Mapping

Sl.	Programme Outcomes	Course Outcomes	Modules
1	PO1, PO2, PO3 & PO5	CO1	M1
2	PO1, PO2, PO3 & PO5	CO1 & CO2	M2
3	PO1, PO2 & PO5	CO2 & CO3	M3
4	PO1, PO2, PO3 & PO4	CO3 & CO4	M4
5	PO1, PO2, PO3, PO4 & PO5	CO4 & CO5	M5 & M6

Suggested Readings

1. C. S. Venkata Ratnam. (n.d.). Industrial relations. Oxford University Press.
2. P. R. N. Sinha, Indu Bala Sinha, & Seema Priyadarshini Shekhar. (n.d.). Industrial relations, trade unions and labour legislation. Pearson.
3. C. B. Mamoria, & S. V. Gankar. (n.d.). Dynamics of industrial relations. Himalaya Publishing House.
4. V. V. Giri. (n.d.). Labour problems in Indian industry.
5. Arun Monappa. (n.d.). Industrial relations. Tata McGraw-Hill.
6. B. D. Singh. (n.d.). Industrial relations and labour laws. Excel Books.
7. Michael Armstrong. (n.d.). Armstrong's handbook of human resource management practice. Kogan Page.

The list of cases and specific references including recent articles and reports will be announced in the class at the time of launching of the course.

MBA-PE-HR-6: LABOUR LEGISLATIONS
Credit: **3**
Total Allotted Hours: **45 [30-15-0]***
Pre-requisite(s): *Human Resource Management (Semester 2)*

Objectives:
To develop understanding of Indian labour legislation, Labour Codes, employer-employee relations, statutory compliance, and contemporary workplace legal issues.

Course Outcomes:

- **CO1:** Explain principles and framework of labour legislation.
- **CO2:** Interpret major Labour Codes and employment laws.
- **CO3:** Apply labour laws to HR decisions and compliance.
- **CO4**: Analyze industrial disputes and social security provisions.
- **CO5**: Recommend ethical and legally compliant HR practices.

Course Contents

Module 1
Emergence and objectives of Labour Laws: Constitutional provisions, Labour policy, Labour Codes overview. **[4 – 3 – 0]***

Module 2
Legislations relating to Working Conditions and Contract Labour: OSHWC Code 2020**;** Contract Labour (Regulations & Abolition) Act, 1970; Shop & Establishment Act – IT, ITEs, Service Industries. **[6 – 3 – 0]***

Module 3
Laws of wages: Code on Wages 2019; The Minimum Wages Act, 1948; The Payment of Wages Act, 1936; The Payment of Bonus Act, 1965; Important Changes made in Wage Code. **[5 – 2 – 0]***

Module 4

Industrial Disputes and Discipline Management (IDDM): Industrial Relations Code 2020; The Trade Unions Act, 1926 and Collective Bargaining; The Industrial Employment (Standing Orders) Act, 1946; The Industrial Disputes Act, 1947; Downsizing, Retrenchment, termination, strike, Adjudicatory Authorities & Conciliation Officer and his Duties and Powers, Industrial discipline and domestic inquiry, Merger and Acquisition. Important Changes Made in IR Code. **[6 – 3 – 0]***

Module 5
Social Security Legislations: Social Security Code 2020; The Employees Compensation Act, 1923; The Employees State Insurance Act, 1948; The Employees Provident Funds and Miscellaneous Provisions Act, 1952; The Payment of Gratuity Act, 1972; The Maternity

Benefit Act, 1961 and policies relating to Maternity Benefit. Important Changes proposed in Social Security Code. Important Changes Made in Social security Code. **[5 – 2 – 0]***

Module 6

Creating Safe Workplaces: women at workplace, POSH, compliance & case studies. **[4-2-0]***

***L-T-P**

Programme Outcomes (POs), Course Outcomes (COs) and Modules Mapping

Sl.	Programme Outcomes	Course Outcomes	Modules
1	PO1, PO2 & PO4	CO1	M1
2	PO1, PO2, PO3 & PO4	CO2	M2
3	PO1, PO2, PO3 & PO5	CO3	M3
4	PO1, PO2, PO3 & PO4	CO4	M4
5	PO1, PO3, PO4 & PO5	CO5	M5
6	PO1, PO3, PO4 & PO5	CO5	M6

Suggested Readings

1. Srivastava, S. C. (2022). Industrial relations and labour laws (7th ed.). Vikas Publishing House.
2. Monappa, A. (2017). Industrial relations and labour laws. Tata McGraw-Hill Education.
3. Padhi, P. K. (2021). Labour and industrial laws (5th ed.). PHI Learning
4. Malik, P. L. (n.d.). Labour and industrial law. Eastern Book Company.
5. Mishra, S. N. (n.d.). Labour and industrial laws. Central Law Publications.
6. Taxmann Publications. (n.d.). Labour codes. Taxmann Publications.
7. Government of India. (2020). The Code on Wages, 2019; the Industrial Relations Code, 2020; the Code on Social Security, 2020; and the Occupational Safety, Health and Working Conditions Code, 2020. Ministry of Labour & Employment.

The list of cases and specific references including recent articles and reports will be announced in the class at the time of launching of the course.

MBA-PE-HR-7: STRATEGIC HUMAN RESOURCE MANAGEMENT
Credit: 3
Total Allotted Hours: **45 [30-15-0] ***
Pre-requisite (s): *Human Resource Management (2nd Semester)*
Objectives: To develop strategic perspectives on human resource management by integrating HR policies with business strategy, organizational capability, sustainability, digital transformation, and global competitiveness.
Course Outcomes (COs)

- **CO1:** Explain strategic HRM concepts and align HR strategies with organizational strategy.
- **CO2:** Analyse internal and external environments for strategic workforce planning and talent management.
- **CO3:** Design strategic HR systems for performance, rewards, leadership, and employee engagement.
- **CO4:** Evaluate global, digital, ethical and sustainability challenges in SHRM using analytics.
- **CO5:** Formulate integrated SHRM solutions through cases and strategic HR scorecards.

Course Contents
Module-1
Foundations of Strategic Human Resource Management: Introduction to SHRM: Concept, evolution, objectives, scope, and strategic role of HR; Traditional HRM vs. SHRM. Theoretical Foundations: Resource-Based View (RBV), Human Capital Theory, and Strategic Fit. Business Strategy and SHRM: Corporate, business and functional strategies; Porter's Generic Strategies and Miles & Snow Strategic Typology; alignment of HR strategy with business strategy. Strategic Role of HR: Ulrich's HR Roles, HR business partnering, HR architecture, strategic jobs and organizational capabilities**. [6-3-0]***
Module-2
Strategic Workforce Planning and Talent Management: Strategic Environmental Scanning: Strategic environmental scanning (PESTLE, SWOT), workforce planning and forecasting, strategic staffing, talent acquisition, employer branding concept and strategies, social media and digital branding, competency-based recruitment, AI-enabled recruitment, onboarding, talent management, career management, succession planning **[6-3-0]***
Module-3
Strategic Performance and Talent Development: Strategic Performance Management: Strategic performance management systems; goal setting, KPIs, KRAs, MBO, Balanced Scorecard and OKRs; strategic rewards and compensation; competency mapping and competency-based HR; leadership development, coaching and mentoring; employee engagement, employee experience, well-being, and retention. Strategic compensation and reward strategy. **[7-4-0]***
Module-4
HR Analytics and Digital Human Resource Management: HR Analytics: HR analytics and people analytics; HR metrics and dashboards; evidence-based HR; HRIS and digital HR transformation; AI applications in HR; cloud HR, remote workforce management, digital learning, data privacy and ethics; future of work, gig economy, hybrid work, reskilling and workforce agility. **[5-3-0]***

Module-5

Global Strategic HRM and Contemporary Issues: Global Strategic Human Resource Management: Global SHRM, international staffing approaches, expatriate management, cross-cultural management, global talent management; Diversity, Equity & Inclusion (DEI); Sustainable and Green HRM; ESG in HR; ethics and governance in SHRM; HR Scorecard and strategic HR audit; contemporary case studies on digital transformation and strategic HR practices. **[6-2-0]***

***L-T-P**

Programme Outcomes, Course Outcomes (COs) and Modules Mapping

Sl.	Programme Outcomes	Course Outcomes	Modules
1	PO1, PO2, PO4	CO1	M1
2	PO1, PO2, PO4	CO2	M2
3	PO1, PO3, PO5	CO3	M3
4	PO2, PO3, PO4	CO4	M4
5	PO1, PO2, PO3, PO4, PO5	CO5	M5

Suggested Readings

1. Armstrong, M. (2008). Strategic Human Resource Management: A Guide to Action (4th ed.). Kogan Page Limited.
2. Jeffrey A. Mello. (2023). Strategic Human Resource Management(6th ed.). Cengage Learning.
3. Charles R. Greer. (2021Strategic Human Resource Management(4th ed.). Pearson.
4. Michael Armstrong, & Stephen Taylor. (2023). Armstrong's handbook of human resource management practice (16th ed.). Kogan Page.
5. Randall S. Schuler, & Susan E. Jackson. (2014). Human resource management and organizational effectiveness: Yesterday and today. Journal of Organizational Effectiveness: People and Performance.
6. T. V. Rao. (2014). HRD audit: Evaluating the human resource function for business improvement (2nd ed.). SAGE Publications India.
7. K. Aswathappa. (2022). Human resource management: Text and cases (10th ed.). McGraw Hill Education (India).
8. Gary Dessler. (2020). Human resource management (16th ed.). Pearson.
9. Raymond A. Noe, John R. Hollenbeck, Barry Gerhart, & Patrick M. Wright. (2022). Fundamentals of human resource management (9th ed.). McGraw-Hill Education.SHRM and CIPD latest reports.

The list of cases and specific references including recent articles and reports will be announced in the class at the time of launching of the course.

MBA-PE-HR-8: ORGANIZATIONAL CHANGE AND DEVELOPMENT

Total Allotted Hours**: 45 [30-15-0]***
pre-requisite(s): *Human Resource Management (Semester II)*

Objectives
To develop knowledge of organizational change, organization development, change leadership, OD interventions and sustainable transformation. To foster the capability to **diagnose systemic challenges** and drive strategic transformation across complex corporate structures. To enable students to apply advanced change management models to **mitigate cultural inertia** and manage diverse stakeholder expectations. To prepare them to develop evidence-based intervention plans that **align human capital** with high-level corporate strategy. To cultivate executive leadership skills to **measure intervention ROI** and sustain agility in volatile markets.

Course Outcomes (COs)

- **CO1**: Explain change and OD theories.
- **CO2**: Analyze organizational issues using OD diagnosis.
- **CO3**: Design OD interventions.
- **CO4**: Evaluate change leadership and culture transformation.
- **CO5**: Recommend ethical and sustainable change practices

Course Contents
Module-1
Foundations of Organization Development and Managing Change: OD Evolution & Scope: Definitions, history, characteristics, and assumptions. Difference between OD, HRM, HRD, Change Management, and Organizational Transformation. **Change Drivers**: Macro environment forces, technological disruptions, globalization, demographics, sustainability, and regulatory shifts. **Theories & Models**: Kurt Lewin's Three-Step Model; Kotter's Eight-Step Model; comparative analysis and contextual application. **The OD Practitioner**: Core competencies, responsibilities, professional ethics, and the consulting lifecycle. **[6 – 3 – 0]***
Module-2
Organization Development Values, Diagnosis and Action Research: Core Values and Principles of OD: Humanistic values, participation, trust, collaboration, empowerment, continuous learning, **Organization Diagnosis:** Purpose and importance of diagnosis; levels of diagnosis (individual, group, organizational); diagnostic models including Open Systems Model, Six-Box Model, McKinsey 7S Framework, and Burke-Litwin Model. **Data Collection Techniques:** Interviews, questionnaires, observation, focus groups, document analysis and surveys. **Action Research Process:** Stages of action research—problem identification, data collection, feedback, action planning, implementation, evaluation, and institutionalization. **Feedback and Data Interpretation:** Presenting diagnostic findings and facilitating organizational learning. **[5 – 2 – 0]***
Module-3
Organization Development Interventions: Concept and Classification of OD Interventions: Human Process, Techno-Structural, Human Resource Management, and Strategic Interventions. **Team Building:** Objectives, stages of team development, improving team effectiveness, conflict resolution, trust-building exercises and collaborative decision-making. **Survey Feedback Intervention:** Designing employee attitude surveys, data analysis, communicating findings, and developing action plans. **Coaching and Mentoring:** Executive

coaching, performance coaching, mentoring relationships, developmental feedback, and career development. **Additional Process Interventions:** Process consultation, sensitivity training, conflict management and inter-group development. **Selection and Evaluation of Interventions:** Matching interventions with organizational needs and assessing effectiveness. **[6 – 3 – 0]***

Module-4

Organizational Culture, Resistance to Change and Leadership: Organizational Culture: Meaning, dimensions, levels, functions and importance of organizational culture; cultural assessment; creating and sustaining high-performance cultures. **Managing Organizational Change:** Types of resistance to change (individual and organizational); causes of resistance; strategies for overcoming resistance; employee engagement during change. **Leadership and Change:** Leadership styles, transformational and transactional leadership, servant leadership, change champions, and leadership competencies for successful OD initiatives. **Communication in Change Management:** Importance of communication, communication planning, stakeholder management, managing uncertainty, conflict resolution and employee participation. **Building Commitment and Trust:** Psychological safety, empowerment and employee involvement during organizational transformation **[7 – 4 – 0]***

Module-5

Contemporary Trends in Organization Development: Digital Transformation and OD: Impact of Artificial Intelligence (AI), automation, digital technologies, Industry 4.0, hybrid work, virtual teams, digital leadership and digital readiness. Learning Organization: Concept, characteristics and importance; systems thinking, knowledge management, continuous improvement and organizational learning. Ethics in Organization Development: Ethical dilemmas in consulting, confidentiality, professional standards, diversity, equity and inclusion, corporate governance and responsible change management. Measuring OD Effectiveness: Evaluation models, ROI of OD interventions, organizational performance indicators, employee engagement and organizational health metrics. Integrated Case Studies: Analysis of OD interventions in Indian and global organizations; contemporary cases on digital transformation, mergers, restructuring, organizational culture change and sustainability initiatives. **[6 – 3 – 0]***

***L-T-P**

Programme Outcomes (POs), Course Outcomes (COs) and Modules Mapping

Sl.	**Programme Outcomes**	**Course Outcomes**	**Modules**
1	PO1, PO2	CO1	M1
2	PO1, PO2	CO1 & CO2	M2
3	PO1, PO3 & PO5	CO2 & CO3	M3
4	PO2, PO3 & PO5	CO3 & CO4	M4
5	PO1, PO2, PO4 & PO5	CO4 & CO5	M5

Suggested Readings

1. Thomas G. Cummings, & Christopher G. Worley. (2020). Organization development and change (11th ed.). Cengage Learning.
2. Wendell L. French, & Cecil H. Bell Jr.. (1999). Organization development: Behavioral science interventions for organization improvement (6th ed.). Prentice Hall.
3. T. V. Rao. (2014). Organisation development: Accelerating learning and transformation. SAGE Publications India.
4. Udai Pareek. (2010). Understanding organisational behaviour (3rd ed.). Oxford University Press.
5. Udai Pareek. (2013). Training instruments in HRD and OD (4th ed.). McGraw Hill Education.

6. Donald L. Anderson. (2019). Organization development: The process of leading organizational change (5th ed.). SAGE Publications.
7. Richard L. Daft. (2021). Organization theory and design (13th ed.). Cengage Learning.
8. Stephen P. Robbins, & Timothy A. Judge. (2023). Organizational behavior (19th ed.). Pearson.
9. Edgar H. Schein, & Peter A. Schein. (2017). Organizational culture and leadership (5th ed.). John Wiley & Sons.
10. Peter M. Senge. (2006). The fifth discipline: The art and practice of the learning organization (Rev. ed.). Doubleday.
11. John P. Kotter. (2012). Leading change. Harvard Business Review Press.
12. Kurt Lewin. (1951). Field theory in social science: Selected theoretical papers. Harper & Row.

The list of cases and specific references including recent articles and reports will be announced in the class at the time of launching of the course.

MBA-PE-HR-9: INTERNATIONAL HUMAN RESOURCE MANAGEMENT

Total Allotted Hours: **45 [30-15-0]***

Pre-requisite(s): *Human Resource Management (Semester II)*

Objectives

The objective of this course is to familiarize students with the strategic role of International Human Resource Management (IHRM) in multinational enterprises operating in an increasingly globalized business environment. The course develops competencies in managing international workforce diversity, global staffing, expatriate management, international performance management, compensation systems, labour relations, and emerging issues such as digital HRM, sustainability, and global talent management.

Course Outcomes (COs)

- **CO1:** Explain the concepts, evolution, and strategic significance of International Human Resource Management in multinational organizations.
- **CO2:** Evaluate international staffing, recruitment, expatriate management, and global talent acquisition strategies across different cultural and institutional contexts.
- **CO3:** Design effective international training, leadership development, performance management, and compensation systems for global organizations.
- **CO4:** Assess international labour standards, industrial relations, diversity, ethics, sustainability, and legal issues affecting global workforce management.
- **CO5:** Apply digital HR technologies, HR analytics, and strategic global talent management practices for enhancing organizational competitiveness

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Course Contents

Module-1

Introduction to IHRM, Globalization, Comparative HRM, Cultural Dimensions: Introduction, nature, scope and evolution of IHRM; Domestic HRM vs. IHRM; Globalization and international business environment; Multinational corporations and internationalization strategies; Comparative HRM and convergence–divergence debate; Institutional perspectives; Cross-cultural management; Hofstede's Cultural Dimensions, Trompenaars' Model, Hall's Context Theory, GLOBE Framework; Cultural intelligence and managing multicultural teams **[6 – 3 -0]***

Module-2

International Staffing, Recruitment, Selection, Expatriate & Repatriation: International staffing approaches (Ethnocentric, Polycentric, Regio centric, Geocentric); Global recruitment and selection; Competency mapping and assessment centers; Expatriate selection, training and adjustment; International assignments; Expatriate performance management; Causes of expatriate failure; Repatriation planning, reverse culture shock, career management and knowledge transfer **[6 – 3 -0]***

Module-3

Global Training, Leadership Development, Performance Management: Global training and development; Cross-cultural learning; International career development; Global leadership competencies and global mindset; Executive development and succession planning; International performance management; Performance appraisal across cultures; 360-degree feedback; Managing virtual global teams; HR analytics in performance management **[6-3-0]***

Module-4

International Compensation, Industrial Relations, Labour Standards, Diversity: International compensation systems; Balance Sheet and Going Rate approaches; Expatriate compensation and benefits; International industrial relations; Trade unions and collective bargaining; International Labour Organization (ILO) and global labour standards; Occupational health and safety; Diversity, equity and inclusion; Managing multicultural and diverse workforces **[6-3-0]***

Module-5

Global Talent Management, Ethics, Sustainability, Digital HRM and Case Studies: Global talent acquisition, development and retention; Succession planning and employer branding; Ethics in IHRM; Corporate Social Responsibility (CSR); Sustainable and Green HRM; Digital HRM; HR Information Systems (HRIS); Artificial Intelligence and People Analytics; Managing remote and hybrid workforce; Emerging trends and integrative case studies in International HRM **[6-3-0]***

***L-T-P**

Programme Outcomes, Course Outcomes (COs) and Modules Mapping

Sl.	Programme Outcomes	Course Outcomes	Modules
1	PO1, PO4	CO1	M1
2	PO1, PO2, PO4	CO2	M2
3	PO1, PO3, PO5	CO3	M3
4	PO2, PO3, PO4	CO4	M4
5	PO1, PO3, PO4, PO5	CO5	M5

Suggested Readings

1. Briscoe, D. R., Schuler, R. S., & Tarique, I. (2022). *International human resource management: Policies and practices for multinational enterprises* (6th ed.). Routledge.
2. Brewster, C., Sparrow, P., Vernon, G., & Houldsworth, E. (2023). *International human resource management* (6th ed.). Kogan Page.
3. Dowling, P. J., Festing, M., & Engle, A. D. (2017). *International human resource management* (7th ed.). Cengage Learning.
4. Aswathappa, K., & Dash, S. (2023). *International human resource management: Text and cases* (3rd ed.). McGraw Hill Education.
5. Budhwar, P. S., & Debrah, Y. A. (Eds.). (2009). *Human resource management in developing countries*. Routledge.
6. Budhwar, P. S., & Bhatnagar, J. (Eds.). (2009). *The changing face of people management in India*. Routledge India.
7. Rao, T. V. (2014). *HRD audit: Evaluating the human resource function for business improvement* (2nd ed.). Sage Publications India.
8. Armstrong, M., & Taylor, S. (2023). *Armstrong's handbook of human resource management practice* (16th ed.). Kogan Page.
9. Tayeb, M. *International human resource management: A multinational company perspective*. Oxford University Press.
10. Bhattacharya, D. K. *Cross-cultural management: Text and cases*. PHI Learning.

The list of cases and specific references including recent articles and reports will be announced in the class at the time of launching of the course.

MBA-PE-HR-10: TRAINING AND DEVELOPMENT

TotalAllottedHours**:45[30-15-0]***

Pre-requisite(s)*: Human Resource Management (2nd Semester)*

Objectives

To develop competencies for planning, designing, delivering and evaluating strategic training and development interventions aligned with organizational goals.

Course Outcomes (COs)

- CO1: Explain strategic concepts of Training and Development.
- CO2: Conduct competency-based Training Needs Assessment.
- CO3: Design and deliver technology-enabled learning interventions.
- CO4: Evaluate training effectiveness using ROI and analytics.
- CO5: Develop leadership, career and organizational learning strategies.

Course Contents

Module-1

Foundations of Training and Development: Concept, nature, scope and evolution of training and development; objectives and strategic importance; distinction between training, education and development; learning theories (Adult Learning, Experiential, Social and Reinforcement); learning organization and role of training in organizational effectiveness. [**5 – 2 – 0]***

Module-2

Training Needs Assessment, Competency Mapping and Skill-Gap Analysis: Training Needs Assessment (organizational, task and individual analysis); methods of TNA; competency mapping and competency frameworks; behavioral and functional competencies; skill-gap analysis; identification and prioritization of training needs; preparation of training plans. **[5 – 3 – 0]***

Module-3

Instructional Design, Training Methods, E-learning and AI-enabled Learning: Instructional design models (ADDIE, SAM, Bloom's Taxonomy); training program design; on-the-job and off-the-job training methods; e-learning, blended learning, LMS, MOOCs and microlearning; AI-enabled learning, adaptive learning, chatbots, learning analytics and ethical considerations. **[6 – 3 – 0]***

Module-4

Training Delivery, Coaching, Mentoring, Simulations and Action Learning: Training delivery process; facilitation and presentation skills; coaching and mentoring techniques;

simulation-based learning, business games, VR/AR applications; action learning, project-based learning and experiential learning. **[5 – 2 – 0]***

Module-5

Training Evaluation, Kirkpatrick Model, Phillips ROI and Learning Analytics: Training evaluation process; Kirkpatrick's Four-Level Evaluation Model; Phillips ROI Model; cost-benefit analysis; learning analytics, performance metrics, dashboards, predictive analytics and continuous improvement of training programs. **[5 – 3 – 0]***

Module-6

Leadership Development, Career Development, Succession Planning, Learning Organization and Future Trends: Leadership development programs; career planning and career development; succession planning and talent management; learning organization and knowledge management; future trends in training and development including AI, personalized learning, reskilling, upskilling and sustainability-focused learning. **[4 – 2 – 0]***

***L-T-P**

Programme Outcomes, Course Outcomes (COs) and Modules Mapping

Sl.	Programme Outcomes	Course Outcomes	Modules
1	PO1, PO2, PO5	CO1	M1
2	PO1, PO2	CO2	M2
3	PO1, PO3, PO5	CO3	M3-M4
4	PO2, PO4	CO4	M5
5	PO1, PO3, PO4, PO5	CO5	M6

Suggested Readings

1. Blanchard, P. N., & Thacker, J. W. (2023). *Effective training: Systems, strategies, and practices* (7th ed.). Pearson.
2. Kirkpatrick, D. L., & Kirkpatrick, J. D. (2016). *Kirkpatrick's four levels of training evaluation*. ATD Press.
3. Lynton, R. P., & Pareek, U. (2011). *Training for development* (3rd ed.). Vistaar Publications.
4. Rao, T. V. (2017). *Readings in human resource development*. Oxford & IBH Publishing.
5. Pareek, U. (2010). *Understanding organisational behaviour* (3rd ed.). Oxford University Press.
6. Noe, R. A. (2023). *Employee training and development* (9th ed.). McGraw-Hill Education.
7. Phillips, J. J., & Phillips, P. P. (2012). *Measuring return on investment in training and performance improvement programs*. Routledge.
8. Senge, P. M. (2006). *The fifth discipline: The art and practice of the learning organization* (Rev. ed.). Doubleday.
9. Association for Talent Development. (Annual). *State of the industry report*. ATD Press.

The list of cases and specific references including recent articles and reports will be announced in the class at the time of launching of the course.

MBA-PE-IST-1: SYSTEM ANALYSIS AND DESIGN
Credit: **3**
Total Allotted Hours: **45 [30-15-0] ***

Pre-requisite(s): *Basic Concepts of Software engineering.*

Objectives
This course aims at giving necessary insights into Analysis, Design, Testing and Implementation of Computer based Information Systems. This course provides the students with necessary techniques and tools available in Systems Analysis and Design

Course Outcomes (COs)
Upon successful completion of this course, students will be able to:

- **CO1:** Introduction to Systems Development Life Cycle (SDLC).
- **CO2:** Understand the System Requirement and Factfinding techniques.
- **CO3:** To know the Project Cost Management tools and techniques.
- **CO4:** Understand the System design and Object Structure.

Course Contents

Module- 1
Overview of Information System. Goals and requirements of Software Development. Overview of Systems Analysis & Design: Business Systems Concepts, Systems Development Life Cycle (SDLC), Life cycle models (Waterfall model, Prototyping model, Incremental model, Spiral model, WIN Spiral Model RAD model). **[8-4-0]***

Module - 2
System Requirement Specification & Analysis: SRS, Fact finding techniques, data - flow diagrams, data dictionaries, decision analysis, Decision Trees and Tables; Control Flow Graphs: Cyclomatic complexity. **[6-2-0]***

Module - 3
Project Cost Management: Importance, Basic Principles, Cost Estimating (Types), Techniques and Tools, Problems with Cost Estimates, Cost Control, Earned Value Management. Estimation Techniques, cost benefit analysis, COCOMO (Basic, Intermediate & complete COCOMO Model).**[8-4-0]***

Module - 4
System design and Interactions: Output Design, Input Design, Coupling and cohesion. Object Structure, Object Features, Classes & Objects, Key Concepts of Object Oriented Approach, Object Representation Methods, Object Status, State Diagram, Modeling behaviour in object Modeling - User Cases, Object Oriented Analysis, Modeling & Design using UML, Event Face Diagram & Event Flow Diagram, Activity Diagram. Software Reliability and Quality Assurance.**[8-5-0]***

***L-T-P**

Programme Outcomes, Course Outcomes (COs) and Modules Mapping

Sl.	Programme Outcomes	Course Outcomes	Modules
1.	PO1, PO2, PO3 & PO5	CO1	MI
2.	PO2, PO3 & PO4	CO2 & CO4	M2
3.	PO1 & PO4	CO1 & CO3	M3
4.	PO2 & PO3	CO1, CO3 & CO4	M4

Suggested Readings

1. Rajaraman, V. Analysis and Design of Information Systems. PHI
2. Sommerville : Software Engineering-Pearson Education
3. RajibMall,Fundamentals of Software Engineering,PHI
4. Roger S. Pressman, Software Engineering: A Practitioner's Approach, TMH

The list of cases and specific references including recent articles and reports will be announced in the class at the time of launching of the course.

MBA-PE-IST-2: DATABASE MANAGEMENT SYSTEMS
Credit: **3**
Total Allotted Hours: **45 [15-0-30] ***

Pre-requisite(s): *Basic Concepts of Computer Science and Engineering*.

Objectives
This course has been designed to introduce the participants with the applications of systems designed to manage the data resources of organizations. It provides the participants an opportunity to study the hands-on implementation of a database in corporate environment.

Course Outcomes (COs)
Upon successful completion of this course, students will be able to:

- **CO1:** Understand the concept DBMS and EDBMS
- **CO2:** Understand the Relational Data Model & Relational Algebra.
- **CO3:** Design and build a simple database system and demonstrate competence with the fundamental tasks involved with modelling, designing, and implementing a DBMS
- **CO4:** Understand the Perform PL/SQL programming.

Course Contents

Module -1
File Systems and Database Systems. Need for using DBMS. Concepts of tables, records, attributes, keys, integrity constraints, 3-schema architecture, data independence. Various Data Base Management Models: The Relational Data Model & Relational Algebra. Relational Calculus. **[4-0-12] ***

Module - 2
The Relational Model, Language & Systems: The Relational Data Model & Relational Algebra. Integrity Rules, Operators, Data Redundancy, Indexes. SQL: DDL, DML, & DCL concepts, SQL commands (ANSI standard). **[4-0-4] ***

Module - 3
Oracle tools; SOL SQL constructs SQL Queries a. Select with all options, Operators, Arithmetic, Comparison, b. Logical (in, between, like, all, %, _, any, exists, is null, and, or, not, Distinct) c. Order by clause. **[5-0-6] ***

Module - 4
PL SQL command summary- data types, operators, DML, DDL, PL/SQL control structures. PL/SQL procedures, PL/SQL functions. **[2-0-8] ***

***L-T-P**

There Shall be a Theory Examination of 50 marks & a Practical Examination of 50 marks at the end of the Term.

Programme Outcomes, Course Outcomes (COs) and Modules Mapping

Sl.	Programme Outcomes	Course Outcomes	Modules
1.	PO1, PO2, PO3 & PO5	CO1	MI
2.	PO2, PO3 & PO4	CO2 & CO4	M2
3.	PO1 & PO4	CO1 & CO3	M3
4.	PO2 & PO3	CO1, CO3 & CO4	M4

Suggested Readings

1. Provost, F. and Fawcett T. (2013), "Data Science for Business", O'Rielly, Sebastopol, CA.
2. Chandha, N.K. Statistics for Behavioral and Social Scientists, Reliance Publishing House, Delhi.
3. Big data. Architettura, tecnologie e metodi per l'utilizzo di grandibasi di dati, A. Rezzani, Apogeo Education, 2013
4. Mayer-Schonberger, V. and Cukier, K. (2014), "Big Data", Mariner Books, Boston, MA.
5. An introduction to Database Systems, C J Date, Addition-Wesley.
6. Database System Concepts, Abraham Silberschatz, Henry F. Korth& S. Sudarshan, McGraw Hill.
7. Gupta, S.P and Gupta M.P. Business Statistics, Sultan Chand, New Delhi.

The list of cases and specific references including recent articles and reports will be announced in the class at the time of launching of the course.

MBA-PE-IST-3: DATA MINING IN BUSINESS DECISION
Credit: **3**
Total Allotted Hours: **45 [15-0-30] ***

Pre-requisite(s): *Basic knowledge in Mathematics, Statistics and Computer Science.*

Objectives
The objective of this paper is to make the students familiar with various valuation techniques. The main focus, however, is in their applications in business decision-making.

Course Outcomes (COs)
Upon successful completion of this course, students will be able to:

- **CO1:** Introduction to Data Mining and Knowledge management system.
- **CO2:** Know about data Ware House Multidimensional data model.
- **CO3:** To know Data Mining and Knowledge Representation.
- **CO4:** Understand the implications different algorithm in data mining.

Course Contents
Module-1
Introduction to Data Mining: data mining, Related technologies – Machine Learning, DBMS, OLAP, Statistics, Data Mining Goals, Stages of the Data Mining Process, Data Mining Techniques, Knowledge Representation Methods Applications **[2-0-4] ***

Module-2
Data Preprocessing
Data Warehouse and OLAP: Data Warehouse and DBMS, Multidimensional data model, OLAP operations. Data cleaning, Data transformation, Data reduction, Discretization and generating concept hierarchies, Installing Weka 3 Data Mining System **[3-0-4] ***

Module-3
Data Mining Knowledge Representation and Attribute-Oriented Analysis
Task relevant data, Background knowledge, Interestingness measures, Representing input data and output knowledge, Visualization techniques, Experiments with Weka- visualization. Attribute generalization, Attribute relevance, Class comparison, Statistical measures **[3-0-6] ***

Module-4
Data Mining Algorithms
Association rules, Motivation and terminology, Generating item sets and rules efficiently, Correlation analysis. Classification, Basic learning/mining tasks, inferring rudimentary rules: 1R algorithm, Decision trees, Covering rules**.** The prediction task, Statistical (Bayesian) classification, Bayesian networks, Instance-based methods (nearest neighbor), Linear models **[4-0-8] ***

Module-5
Clustering
Basic issues in clustering, conceptual clustering system, Partitioning methods: k-means, expectation maximization (EM), Hierarchical methods: distance-based agglomerative and divisible clustering, Conceptual clustering: Cobweb **[3-0-8] ***

***L-T-P**

There Shall be a Theory Examination of 50 marks & a Practical Examination of 50 marks at the end of the Term.

Programme Outcomes, Course Outcomes(COs) and Modules Mapping

Sl.	Programme Outcomes	Course Outcomes	Modules
1.	PO1, PO2, PO3 & PO5	CO1	MI
2.	PO2, PO3 & PO4	CO2 & CO4	M2
3.	PO1 & PO4	CO1 & CO3	M3
4.	PO2 & PO3	CO1, CO3 & CO4	M4
5.	PO2, PO3 & PO5	CO2 & CO3	M5

Suggested Readings

1.R and Data Mining: Examples and Case Studies – Yanchang Zhao
2. Data Analytics using R – Seema Acharya, Mc Graw Hill Publication
3. Introduction to data science: practical approach withy R and Python / by B. Uma
4.Maheswari and R. Sujatha. - New Delhi: Wiley India, 2023

The list of cases and specific references including recent articles and reports will be announced in the class at the time of launching of the course.

MBA-PE-IST-4: BUSINESS FORECASTING & TIME SERIES ANALYSIS
Credit: **3**
Total Allotted Hours: **45 [15-0-30] ***

Pre-requisite(s): *Knowledge in Computer Science, Statistics & Quantitative Techniques*

Objectives
This course aims at giving necessary insights into Analysis, Design, Testing and Implementation of Computer based Information Systems. This course provides the students with necessary techniques and tools available in Systems Analysis and Design

Course Outcomes (COs)
Upon successful completion of this course, students will be able to:

- **CO1:** Identify, collect, and organize relevant data useful for forecasting
- **CO2:** Identify the appropriate forecasting methods (regression, time series, smoothing, etc.) for any given data.
- **CO3:** Forecast using regression.
- **CO4:** Interpret the results and write a basic report useful for management for decision-making.

Course Contents

Module -1
Introduction to Business Forecasting, Overview of the forecast, Review of Statistics, Linear Regression Model **[4-0-0] ***

Module - 2
Introduction to Forecasting with Regression Methods, RMSE and Coefficient of Determination, Introduction to Multiple Regression, Statistical Inference in Multiple Regression; Multiple Linear Regression Model, Time Series Regression experiment. **[4-0-10] ***

Module - 3
Comparative Analysis Using Regression, Variable Selection in Multiple Regression, Model Selection in Regression, Checking Regression Models, Autocorrelation in Regression **[4-0-8]***

Module - 4
Introduction of Time Series: Some representative Time series, Terminology, Objective of Time Series, Approaches to Time Series, Types of Variation, Trend and Seasonal Variation; i) Modeling and Forecasting Trend experiment ii) Modeling and Forecasting Seasonality experiment **[3-0-12]***

***L-T-P**

There Shall be a Theory Examination of 50 marks & a Practical Examination of 50 marks at the end of the Term.

Programme Outcomes, Course Outcomes (COs) and Modules Mapping

Sl.	Programme Outcomes	Course Outcomes	Modules
1.	PO1, PO2, PO3 & PO5	CO1	MI
2.	PO2, PO3 & PO4	CO2 & CO4	M2
3.	PO1 & PO4	CO1 & CO3	M3
4.	PO2 & PO3	CO1, CO3 & CO4	M4

Suggested Readings

1.“Forecasting and Time Series”, 4th Edition, byBowerman and O’Connell, Duxbury
2. Francis X. Diebold, *Elements of Forecasting,* 4Edition, South-western Cengage Learning, 2007
3. J. Holton Wilson and Barry Keating, *Business Forecasting with ForecastX*™*,* 6th Edition McGraw Irwin, John Galt Solutions, Inc

The list of cases and specific references including recent articles and reports will be announced in the class at the time of launching of the course.

MBA-PE-IST-5: CYBER SECURITY

Credit: **3**
Total Allotted Hours: **45 [30-15-0] ***

Pre-requisite(s): *Knowledge in computer science, Information technology and Communication Engineering.*

Objectives
The exposure of the students to Cyber Security program at Post Graduate level should lead to learn the foundations of Cyber security and threat landscape and to expose students to governance, regulatory, legal, economic, environmental, social and ethical contexts of cyber security
Course Outcomes (COs)
Upon successful completion of this course, students will be able to:

- **CO1:** Understand the cyber security threat landscape.
- **CO2:** Develop a deeper understanding and familiarity with various types of cyber-attacks, cybercrimes, vulnerabilities and remedies thereto.
- **CO3:** Analyse and evaluate the importance of personal data its privacy and security.
- **CO4:** Analyse and evaluate the digital payment system security and remedial measures against digital payment frauds.

Course Contents

Module -1
Introduction to Cyber security
Defining Cyberspace and Overview of Computer and Web-technology, Architecture of cyberspace, Communication and web technology, Internet, World wide web, Advent of internet, Internet infrastructure for data transfer and governance, Internet society, Regulation of cyberspace, Concept of cyber security, Issues and challenges of cyber security. **[6-0-0]***

Module - 2
Cybercrime and Cyber law
Classification of cybercrimes, Common cybercrimes- cybercrime targeting computers and mobiles, cybercrime against women and children, financial frauds, social engineering attacks, malware and ransom ware attacks, zero day and zero click attacks, Cybercriminals modus-operandi , Reporting of cybercrimes, Remedial and mitigation measures, Legal perspective of cybercrime, IT Act 2000 and its amendments, Cybercrime and offences, Organisations dealing with Cybercrime and Cyber security in India, Case studies.**[6-4-0]***

Module - 3
Social Media Overview and Security
Introduction to Social networks. Types of Social media, Social media platforms, Social media monitoring, Hash tag, Viral content, Social media marketing, Social media privacy, Challenges, opportunities and pitfalls in online social network, Security issues related to social media, Flagging and reporting of inappropriate content, Laws regarding posting of inappropriate content, Best practices for the use of Social media, Case studies. **[8-6-0]***

Module - 4

E-Commerce and Digital Payments

Definition of E- Commerce, Main components of E-Commerce, Elements of E-Commerce security, E-Commerce threats, E-Commerce security best practices, Introduction to digital payments, Components of digital payment and stake holders, Modes of digital payments- Banking Cards, Unified Payment Interface (UPI), e-Wallets, Unstructured Supplementary Service Data (USSD), Aadhar enabled payments, Digital payments related common frauds and preventive measures. RBI guidelines on digital payments and customer protection in unauthorized banking transactions. Relevant provisions of Payment Settlement Act,2007.

[10-5-0]*

***L-T-P**

Programme Outcomes, Course Outcomes (COs) and Modules Mapping

Sl.	**Programme Outcomes**	**Course Outcomes**	**Modules**
1.	PO1, PO2, PO3 & PO5	CO1	MI
2.	PO2, PO3 & PO4	CO2 & CO4	M2
3.	PO1 & PO4	CO1 & CO3	M3
4.	PO2 & PO3	CO1, CO3 & CO4	M4

Suggested Readings

1. Cyber Crime Impact in the New Millennium, by R. C Mishra , Auther Press. Edition 2010.
2. Cyber Security Understanding Cyber Crimes, Computer Forensics and Legal Perspectives by Sumit Belapure and Nina Godbole, Wiley India Pvt. Ltd. (First Edition, 2011)
3. Security in the Digital Age: Social Media Security Threats and Vulnerabilities by Henry A. Oliver, Create Space Independent Publishing Platform. (Pearson , 13th November, 2001) 4. Electronic Commerce by Elias M. Awad, Prentice Hall of India Pvt Ltd.

The list of cases and specific references including recent articles and reports will be announced in the class at the time of launching of the course.

MBA-PE-IST-6: E-COMMERCE AND DIGITAL MARKETS ANALYTICS
Credit: **3**
Total Allotted Hours: **45 [15-0-30]***

Pre-requisite(s): *Basic Knowledge in Marketing, Basic Knowledge in Python and R*

Objectives
This course will provide the students with an analytical and technical framework to understand the world of e-commerce. It will also focus on various Social media and digital marketing techniques and real-world application of digital marketing and e-commerce methods.

Course Outcomes (COs)
Upon successful completion of this course, students will be able to:

- **CO1:** Understand the concept of E-commerce.
- **CO2:** Understand the Digital Marketing and E-Payment Systems.
- **CO3:** To Search Engine Optimization and how Search Engine works;
- **CO4:** Understand the concept, analytic and reputation management of digital marketing.

Course Contents

Module -1
Introduction to E-commerce
E-commerce or Electronic Commerce- An Overview, Electronic Commerce – Cutting edge, Electronic Commerce Framework, Evolution of E-commerce, Basic Blocks of e-commerce. Business Models, E-business Models Based on the Relationship of Transaction Parties, e-commerce Sales Life Cycle (ESLC) Model. **[4-0-0]***

Module - 2
Digital Marketing and E-Payment Systems
Benefits of Digital V/s Traditional Marketing; Digital Marketing Platforms; Defining Digital Marketing Goals; Latest Digital Marketing Trends. Email Marketing; Affiliate Marketing; Inbound Marketing, Content Marketing, Commercial Packages for E-shopping portal. Electronic Payment Systems, Electronic Cash, Smart Cards and Electronic Payment Systems, Credit Card Based Electronic Payment Systems, Risks and Electronic Payment Systems.
[3-0-8] *

Module - 3
Social Media Marketing
What is Social Media; SMM v/s SMO; Benefits of SMM; Social Media Strategy; Facebook Marketing; Twitter Marketing; You-tube Marketing; Instagram Marketing; Google+ Marketing; LinkedIn Marketing; Pinterest Marketing. **[3-0-6]***

Module - 4
Search Engine Optimization
Introduction to Search Engines; How Search Engine works; Search Engine Optimization & its Benefits; Search Engine Marketing; Google Adwords; Google Adsense; Display Advertising; Keyword Optimization. **[3-0-8]***

Module - 5

Digital Market Analytics and Online Reputation Management

Basic Concept of Analytics; Need for Analytics; Google Analytics; Traffic Reports; Behavior Reports; Audience Reports; Conversion Tracking; Alexa. What is ORM; Need of ORM; Examples of ORM; Areas to Analyze ORM; Generate ORM Report; Tools for managing Online Reputation. **EDI:** Introduction, Features, Benefits, Application, Model, Protocol.
[2-0-8]*

***L-T-P**

There Shall be a Theory Examination of 50 marks & a Practical Examination of 50 marks at the end of the Term.

Programme Outcomes, Course Outcomes (COs) and Modules Mapping

Sl.	Programme Outcomes	Course Outcomes	Modules
1.	PO1, PO2, PO3 & PO5	CO1	MI
2.	PO2, PO3 & PO4	CO2 & CO4	M2
3.	PO1 & PO4	CO1 & CO3	M3
4.	PO2 & PO3	CO1, CO3 & CO4	M4
5.	PO2 & PO3	CO1, CO2,CO3 & CO4	M5

Suggested Readings

1. Kalakota, Whinston : Frontiers of Electronic Commerce , Pearson Education.
2. Loshin Pete, Murphy P.A. : Electronic Commerce , Jaico Publishing Housing.
3. Bhaskar, Bharat : Electronic Commerce - Technologies &Applications. MH
4. Puneet Singh Bhatia: Fundamental of Digital Marketing, Pearson
5. Dave Chaffey and Fiona Ellis-Chadwick: Digital Marketing: Strategy, Implementation & Practice
6. Digital Marketing: Strategy, Implementation & Practice Byave Chaffey & Fiona Ellis-Chadwick.
7. Dan Croxen-John, Johann van Tonder: E-Commerce Website Optimization

The list of cases and specific references including recent articles and reports will be announced in the class at the time of launching of the course.

MBA-PE-IST-7: ADVANCED DATA SCIENCE
Credit: **3**
Total Allotted Hours: **45 [15-0-30] ***

Pre-requisite(s): *Knowledge in Mathematics, Statistics, Computer programming, Python and R*

Objectives
This course will provide the students with an analytical and technical framework to understand the world of e-commerce. It will also focus on various Social media and digital marketing techniques and real-world application of digital marketing and e-commerce methods.

Course Outcomes (COs)
Upon successful completion of this course, students will be able to:

- **CO1:** Understand the Exploratory data analysis.
- **CO2:** Model selection and evaluation.
- **CO3:** To different types of algorithm and their application.
- **CO4:** Understand the Big data distribution and analysis.

Course Contents

Module -1
Data & Information
Elements of statistics &DBMS- Exploratory data analysis Introduction to machine learning- Linear regression and regularization**. [4-0-0] ***

Module - 2
Model selection and evaluation
Classification: kNN, decision trees- Classification: SVM.
[4-0-10] *

Module - 3
Ensemble methods
Random forests-Clustering: k-means, hierarchical clustering- Text mining and information retrieval- Big data storage and retrieval: noSQL, GraphDB.**[4-0-10]***

Module - 4
Big data distributed computing
Map reduce, spark rdd- Advanced: neural networks and deep learning **[3-0-10]***

***L-T-P**

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Programme Outcomes, Course Outcomes (COs) and Modules Mapping

Sl.	Programme Outcomes	Course Outcomes	Modules
1.	PO1, PO2, PO3 & PO5	CO1	MI
2.	PO2, PO3 & PO4	CO2 & CO4	M2
3.	PO1 & PO4	CO1 & CO3	M3
4.	PO2 & PO3	CO1, CO3 & CO4	M4

Suggested Readings

1. Foster Provost and Tom Fawcett , Data Science for Business, O'Reilly Media Inc.
2. Nina Zumel, John Mount , Practical Data Science with R. Manning, 2014
3. Halady P, Business Analytics: An Application Focus , PHI
4. Robert Tibshirani and Trevor Hastie , An Introduction to Statistical Learning, Springer Texts in Statistics
5. Allen B. Downey, Think Stats: Probability and Statistics for Programmers,
6. O'Reilly Media Inc.

The list of cases and specific references including recent articles and reports will be announced in the class at the time of launching of the course.

MBA-PE-IST-8: BUSINESS INTELLIGENCE AND DECISION SUPPORT SYSTEM
Credit: **3**
Total Allotted Hours: **45 [15-0-30]***

Pre-requisite(s): *Basic knowledge in mathematics, Computer application and Marketing*

Objectives
The objective of this paper is to make the students familiar with various valuation techniques. The main focus, however, is in their applications in business decision-making.
Course Outcomes (COs)
Upon successful completion of this course, students will be able to:

- **CO1:** Introduction on the various types approaches of BI.
- **CO2:** Understand the source of Decision Making in Business.
- **CO3:** Learn the basic techniques of Analytics.
- **CO4:** Understand the implications of Analytics in business decision making.

Course Contents

Module-1
Business Intelligence
Introduction, Framework of Business Intelligence- Definition, History, Architecture of BI, benefits of BI, Intelligence creation and use of BI governance, Transaction processing versus analytic processing, BI implementation – Developing or acquiring BI, Justification and Cost-benefit analysis, Security and protection of privacy, Integration of systems and applications, BI tools and techniques, Major vendors**. [4-0-8]***

Module-2
Data Warehousing
Definition, and concepts, Characteristics, Data marts, Operational data stores, Enterprise data warehouse, metadata, Architectures. Data warehouse process overview. Data integration, ELT and ETL (Extract-Transform-Load). Data warehouse development – Vendors, Development approaches, Representation of data in data warehouse, OLAP Vs OLTP, OLAP operations Implementation issues of data warehouse, Administration, security and future trends of data warehouse. **[6-0-0]***

Module-3
Basic of BI and DSS
Analytics to Business Problems, Slicing and Dicing Marketing data with Pivot Tables, Excel Charts to summarize data. **[2-0-10] ***

Module-4
Application of Analytics
Pricing Analytics: Basic Concept of Pricing, Estimating Demand Curves and Optimize Price, Price Bundling, Non Linear Pricing and Price Skimming.

Marketing Forecasting: Simple Regression and Correlation, Multiple Regression to forecast sales, Modeling trend and Seasonality, Ratio to Moving Average Method, winter's Method.

Strategic Marketing Analytics: The STP framework, Value generation through STP framework, Managing the segmentation process, Segmentation in Real world: Cluster Analysis, Hierarchical and Non-Hierarchical - K Means Clustering, Prediction of Customer's segment membership: Discriminant Analysis (DA), two Group DA **[3-0-12] ***

***L-T-P**

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Programme Outcomes, Course Outcomes (COs) and Modules Mapping

Sl.	Programme Outcomes	Course Outcomes	Modules
1.	PO1, PO2, PO3 & PO5	CO1	MI
2.	PO2, PO3 & PO4	CO2 & CO4	M2
3.	PO1 & PO4	CO1 & CO3	M3
4.	PO2 & PO3	CO1, CO3 & CO4	M4

Suggested Readings

1. Marketing Analytics - Data-driven Techniques with Microsoft Excel by Wayne L. Winston, Wiley
2. Marketing and Sales Analytics: Proven Techniques and Powerful Applications from Industry Leaders by Cesar A. Brea, Pearson
3. Marketing analytics: Seema Gupta and Avadhoot Jathar. - New Delhi: Wiley India, 2024R.
4. Advanced Customer Analytics: Targeting, Valuing, And Segmenting and Loyalty Techniques' Mike Grigsby
5. Digital Marketing Analytics: Making sense of Consumer Data in digital world, Chuck Hemann, Ken Burbary; Que Publishing

The list of cases and specific references including recent articles and reports will be announced in the class at the time of launching of the course.

MBA-PE-IST-9: MULTIVARIATE DATA ANALYSIS
Credit: **3**
Total Allotted Hours: **45 [15-0-30] ***

Pre-requisite(s): *A reasonable level of competence in both statistics and mathematics and Computer application.*

Objectives
This course is designed to provide students with a working knowledge of the basic concepts underlying the most important multivariate techniques, with an overview of actual applications in various fields, and with experience in actually using such techniques on a problem of their own choosing.

Course Outcomes (COs)
Upon successful completion of this course, students will be able to:

- **CO1:** Introduction on multivariate data analysis.
- **CO2:** Understand underlying theory for the analysis of multivariate data.
- **CO3:** Able to choose appropriate procedures for multivariate analysis.
- **CO4:** Use the R/ Splus/ SAS/ MATLAB/ Python language to carry out analyses and interpret the output of such analyses.

Course Contents

Module- 1
Modelling and inference using the multivariate normal distribution
Multivariate data and models, Multivariate Normal distribution, Traditional inference: Multivariate, Regression, MANOVA, etc., Links with mixed linear models and hierarchical modelling. **[6-0-0] ***

Module -2
Exploratory techniques based eigenvalue and singular decomposition.
Singular value decomposition (SVD) of a data matrix; special decomposition, Principle Component Analysis, Factor Analysis Canonical Correlation. **[3-0-10] ***

Module-3
Classification, Clustering and Functional data analysis.
Linear Discrimination, Classification Trees, Multidimensional Scaling, Functional PCA, Functional Classification, Functional Clustering. **[3-0-10] ***

Module - 4
A real life project consists of data analysis of a data set using the R/ MATLAB/ Python language to carry out the analyses of the project. **[3-0-10] ***

***L-T-P**

There Shall be a Theory Examination of 50 marks & a Practical Examination of 50 marks at the end of the Term.

Programme Outcomes, Course Outcomes (COs) and Modules Mapping

Sl.	**Programme Outcomes**	**Course Outcomes**	**Modules**
1.	PO1, PO2, PO3 & PO5	CO1	MI
2.	PO2, PO3 & PO4	CO2 & CO4	M2
3.	PO1 & PO4	CO1 & CO3	M3
4.	PO2 & PO3	CO1, CO3 & CO4	M4

Suggested Readings

1. An R and S-plus companion to multivariate analysis. Springer by Everitt, B. (2005).
2. Applied Multivariate Statistical Analysis, 5th ed. Prentice Hall by Johnson, R.A. and Wichern, D.W. (2002).
3. Structural Equations with Latent Variables Wiley, 1989 by Bollen,

The list of cases and specific references including recent articles and reports will be announced in the class at the time of launching of the course.

MBA-PE-IST-10: DEEP LEARNING AND NEURAL NETWORK
Credit: **3**
Total Allotted Hours: **45 [15-0-30] ***

Pre-requisite(s): *Programming using Python/Object Oriented Programming using Python/Mathematics for Computing*

Objectives
This course is designed to provide students with a working knowledge of the basic concepts underlying the most important multivariate techniques, with an overview of actual applications in various fields, and with experience in actually using such techniques on a problem of their own choosing.

Course Outcomes (COs)
Upon successful completion of this course, students will be able to:

- **CO1:** Describe the feed-forward and deep networks.
- **CO2:** Design single and multi-layer feed-forward deep networks and tune various hyper parameters.
- **CO3:** Implement deep neural networks to solve a problem.
- **CO4:** Analyze performance of deep networks.

Course Contents

Module- 1
Introduction to neural networks
Artificial neurons, perception, computational models of neurons, Structure of neural networks, Multilayer feed forward neural networks (MLFFNN), Back propagation learning, Empirical risk minimization, bias-variance trade-off, Regularization, output units: linear, softmax , hidden units:tanh, RELU. **[4-0-0] ***

Module -2
Deep neural networks
Difficulty of training DNNs, Greedy layer wise training, Optimization for training DNN's, Newer optimization methods for neural networks (AdaGrad, RMSProp, Adam), Regularization methods (dropout, drop connect, batch normalization). **[4-0-10] ***

Module-3
Convolution neural networks (CNNs)
Introduction to CNN - convolution, pooling, Deep CNNs - LeNet, AlexNet. Training CNNs, weights initialization, batch normalization, hyperparameter optimization, using a pre trained convent. **[3-0-10] ***

Module - 4
Recurrent neural networks (RNNs) and Unsupervised deep learning
Sequence modeling using RNNs, Backpropagation through time, LongShort Term Memory (LSTM), Bidirectional RNN, Autoencoders, Generative Adversarial Networks. **[4-0-10] ***

***L-T-P**

There Shall be a Theory Examination of 50 marks & a Practical Examination of 50 marks at the end of the Term.

Programme Outcomes, Course Outcomes (COs) and Modules Mapping

Sl.	Programme Outcomes	Course Outcomes	Modules
1.	PO1, PO2, PO3 & PO5	CO1	MI
2.	PO2, PO3 & PO4	CO2 & CO4	M2
3.	PO1 & PO4	CO1 & CO3	M3
4.	PO2 & PO3	CO1, CO3 & CO4	M4

Suggested Readings

1. Artificial Intelligence- Ritch & Knight TMH
2. Deep Learning with Python Paperback- François Chollet (Author)
3. Pattern Recognition & Machine Learning – C.M. Bishop (Springer)

The list of cases and specific references including recent articles and reports will be announced in the class at the time of launching of the course.