



SCHOOL OF MANAGEMENT

DEPARTMENT OF MANAGEMENT STUDIES

REGULATION R24

SYLLABUS BOOK

Department of Management Studies

Vision:

To emerge as a globally recognized **school of excellence** in management education, integrating technology, research, innovation and entrepreneurship to develop responsible leaders serving enterprises and society.

Mission:

- DM1: To foster outcome-based and technology-integrated management education aligned with global standards.
- DM2: To promote research, innovation, and interdisciplinary approaches in management education and practice.
- DM3: To strengthen industry, academic, and global partnerships for experiential learning and professional exposure.
- DM4: To empower entrepreneurial, ethical and competent leaders with commitment to inclusivity, sustainability and lifelong learning.

Programme Educational Outcomes:

- PEO1: To equip graduates to solve complex managerial problems using data-driven, analytical, and technology-enabled approaches for successful and sustainable careers.
- PEO2: To enhance the ability to work collaboratively in teams, demonstrate leadership skills, and adapt to dynamic and global business environments.
- PEO3: To foster professional competence, innovation, and entrepreneurial mindset to create ethical, socially responsible, and sustainable business leaders.

Programme Outcomes (POs):

- PO1 : Apply the knowledge of management theories and practices for effective functioning of an organization.
- PO2 : Foster analytical and critical thinking abilities for data-based decision making.
- PO3 : Ability to develop the value based Leadership quality.
- PO4 : Ability to understand, analyze and communicate the global, economic, legal, and ethical aspects of business.
- PO5 : Ability to lead themselves and others in the achievement of organizational goals, contributing effectively to a team environment.
- PO6 : Develop and exhibit entrepreneurship skills
- PO7 : Ability to pursue lifelong learning.

Semester I Course Details

[illegible]

Semester II Course Details

Sl. No.	Course Code	Course Title	Type	L	T	P	C
1.	2431MG1506	Marketing Management	PC	3	0	0	3
2.	2431MG1507	Applied Operations Research	PC	3	1	0	4
3.	2431MG1508	Financial Management	PC	3	1	0	4
4.	2431MG1509	Human Resource Management	PC	3	0	0	3
5.	2431MG1510	Business Research Methods	PC	3	0	0	3
6.	2431MG1511	Operations Management	PC	3	0	0	3
7.	2431MG1512	Business Ethics and Corporate Social Responsibility	PC	3	0	0	3
8.	2433AE1501	Introduction to Airline Industry (Batch 2024-26)	OE	3	0	0	3
	2433CS1502	Big Data Analytics (Batch 2025-27)	OE	3	0	0	3
9.	2435MG1501	Indian Knowledge System	AEC	1	0	0	1
10.	2434MG3501	Professional Proficiency	SEC	0	0	2	1
Total Credits							28

Semester III Course Details

[illegible]

Semester IV Course Details

Sl. No.	Course Code	Course Title	Type	L	T	P	C
1	2431MG1601	Business Strategy	PC	3	0	0	3
		Programme Elective – VII	PE	3	0	0	3
2		Programme Elective – VIII	PE	3	0	0	3
3	2437MG7600	Project Work	IL	0	0	12	6
4	2437MG4600	Publication of Research Paper	IL	0	0	2	1
Total Credits							16

Overall Credits: 96

SEMESTER III ELECTIVES

DIGITAL MARKETING

Sl. No.	Course Code	Course Name	L	T	P	C
1	2432MG1600	Introduction to Digital Marketing	3	0	0	3
2	2432MG1601	E-Commerce and Digital Markets	3	0	0	3
3	2432MG1602	Social Media Marketing	3	0	0	3
4	2432MG1603	Content Marketing and Communication	3	0	0	3
5	2432MG1604	Affiliate Marketing	3	0	0	3
6	2432MG1605	Search Engine Marketing and SEO	3	0	0	3

FINANCE

Sl. No.	Course Code	Course Name	L	T	P	C
1	2432MG1606	Investment Analysis and Portfolio Management	3	0	0	3
2	2432MG1607	Advanced Corporate Finance	3	0	0	3
3	2432MG1608	Strategic Cost Accounting and Management Control	3	0	0	3
4	2432MG1609	Financial Risk Analytics	3	0	0	3
5	2432MG1610	IT Consulting in Banking and Financial Services	3	0	0	3
6	2432MG1611	International Finance	3	0	0	3

HUMAN RESOURCE

Sl. No.	Course Code	Course Name	L	T	P	C
1	2432MG1612	Change Management	3	0	0	3
2	2432MG1613	Cross Cultural Management	3	0	0	3
3	2432MG1614	HR Metrics and Analytics	3	0	0	3
4	2432MG1615	Industry Psychology	3	0	0	3
5	2432MG1616	Learning and Development	3	0	0	3
6	2432MG1617	Talent Management	3	0	0	3

BUSINESS ANALYTICS

Sl. No.	Course Code	Course Name	L	T	P	C
1	2432MG1618	Artificial Intelligence and Big Data in Business	3	0	0	3
2	2432MG1619	Business Analytics and Intelligence	3	0	0	3
3	2432MG1620	Data Management and Visualization	3	0	0	3
4	2432MG1621	Digital Transformation	3	0	0	3
5	2432MG1622	Enterprise Resource Planning	3	0	0	3
6	2432MG1623	Information Security and Risk Management	3	0	0	3
7	2432MG1636	Machine Learning	3	0	0	3

LOGISTICS AND SHIPPING MANAGEMENT

Sl. No.	Course Code	Course Name	L	T	P	C
1	2432MG1624	Logistics and Supply Chain Management	3	0	0	3
2	2432MG1625	Containerization and Multi Modal Transport	3	0	0	3
3	2432MG1626	Port and Terminal Management	3	0	0	3
4	2432MG1627	Maritime Law and Insurance	3	0	0	3
5	2432MG1628	Air Cargo Management	3	0	0	3
6	2432MG1629	Distribution and Warehouse Management	3	0	0	3

TECHNOPRENEURSHIP

Sl. No.	Course Code	Course Name	L	T	P	C
1	2432MG1630	Business Plan and Ethics	3	0	0	3
2	2432MG1631	IPR Management	3	0	0	3
3	2432MG1632	Digital Innovations	3	0	0	3
4	2432MG1633	International Strategic Management and Government Policy	3	0	0	3
5	2432MG1634	Technology and Global Business Linkage Opportunities	3	0	0	3
6	2432MG1635	Global Start-up Exchange Incubation Program	3	0	0	3

SEMESTER IV ELECTIVES**DIGITAL MARKETING**

Sl. No.	Course Code	Course Name	L	T	P	C
1	2432MG1637	Service Innovation and Customer Engagement	3	0	0	3
2	2432MG1638	Digital Consumer Behaviour	3	0	0	3
3	2432MG1639	Reputation and Influence Management	3	0	0	3
4	2432MG1640	Sales and Channel Management	3	0	0	3

FINANCE

Sl. No.	Course Code	Course Name	L	T	P	C
1	2432MG1641	Financial Derivatives	3	0	0	3
2	2432MG1642	Financial Modelling	3	0	0	3
3	2432MG1643	Commercial Banking and Financial Services	3	0	0	3
4	2432MG1644	Fintech and Blockchain Technology	3	0	0	3

HUMAN RESOURCE

Sl. No.	Course Code	Course Name	L	T	P	C
1	2432MG1645	Industrial Relation and Conflict Management	3	0	0	3
2	2432MG1646	Performance Management and Competency Mapping	3	0	0	3
3	2432MG1647	Interpersonal Effectiveness	3	0	0	3
4	2432MG1648	Organizational Development and Sustainability	3	0	0	3

BUSINESS ANALYTICS

Sl. No.	Course Code	Course Name	L	T	P	C
1	2432MG1649	Systems Modelling and Simulation	3	0	0	3
2	2432MG1650	Business Models	3	0	0	3
3	2432MG1651	Digital Platforms	3	0	0	3
4	2432MG1652	Society, Ethics and Analytics	3	0	0	3

LOGISTICS AND SHIPPING MANAGEMENT

Sl. No.	Course Code	Course Name	L	T	P	C
1	2432MG1653	Export and Import Management	3	0	0	3
2	2432MG1654	Supply Chain Analytics	3	0	0	3
3	2432MG1655	Sustainable Logistics and Green Shipping	3	0	0	3
4	2432MG1656	Lean Management	3	0	0	3

INDUSTRY OFFERED COURSES

SL. No.	Course Code	Course Title	Type	L	T	P	C
1	2432MG9600	Digital Marketing Services	PE	3	0	0	3
2	2432MG9601	Introduction to SEO and Google Ads	PE	3	0	0	3
3	2432MG9602	Mobile Marketing and Content Development	PE	3	0	0	3
4	2432MG9603	Cost Analysis and Strategic Control	PE	3	0	0	3
5	2432MG9604	Applied GST for Business Decision Making	PE	3	0	0	3
6	2432MG9605	Practical Fintech for Business and Investment	PE	3	0	0	3
7	2432MG9606	Strategic Change and Innovation	PE	3	0	0	3
8	2432MG9607	Work Place Psychology	PE	3	0	0	3
9	2432MG9608	Talent Development and Training	PE	3	0	0	3
10	2432MG9609	AI Application in Management	PE	3	0	0	3
11	2432MG9610	Managing Digital Transformation	PE	3	0	0	3
12	2432MG9611	Analytics for Strategic Decision Making	PE	3	0	0	3
13	2432MG9612	Strategic Logistics and Operations	PE	3	0	0	3
14	2432MG9613	Inventory & Facility Management	PE	3	0	0	3
15	2432MG9614	Lean Management	PE	3	0	0	3

OPEN ELECTIVE COURSE OFFERED TO OTHER DEPARTMENT

Sl. No.	Course Code	Course Name	L	T	P	C
1	20233MG401	Training and Development	3	0	0	3
2	20233MG402	Intellectual Property	3	0	6	3
3	20233MG404	Management Information System	3	0	6	3
4	20233MG405	Operations and Supply Chain Management	3	0	6	3
5	20233MG407	Entrepreneurship	3	0	6	3
6	20233MG408	Business Development: from Start to Scale	3	0	6	3
7	20233MG409	Business Ethics	3	0	6	3
8	20233MG411	Leadership and Team Effectiveness	3	0	6	3
9	20233MG412	Business Fundamentals for Entrepreneurs	3	0	6	3
10	2163MG401	Research Methodology	2	0	6	2

VALUE ADDED COURSES (30 HOURS)

Sl. No.	Course Code	Course Name	L	T	P	C
1	2438MG1001	Innovation and Design Thinking	-	-	-	-
2	2438MG1002	Business Data Analytics and Visualization	-	-	-	-

MANDATORY COURSES OFFERED TO FME

Sl. No.	Course Code	Course Name	L	T	P	C
1	2519MG1001	Project Management and Finance	-	-	-	-
2	2519MG1002	Innovation and Entrepreneurship	-	-	-	-

Semester I Course Details

[illegible]

Semester I

Course Code	Course Title	L	T	P	C
2431MG1500	FUNDAMENTALS OF MANAGEMENT AND ORGANIZATIONAL BEHAVIOUR	3	0	0	3

1. Preamble

This course aims to provide students with a comprehensive understanding of management principles, concepts, and practices. It focuses on the evolution of management thoughts, functions, and roles of managers, and the various approaches to management. The course also covers organizational behavior, motivation, leadership, group dynamics, and conflict management.

2. Prerequisite

Basic knowledge on Management

3. Links to Other Courses

All fundamental courses of management.

4. Course Educational Objectives

1. To study the principles of management and its functions.
2. To develop an understanding of the theory and principles of organization management and the resulting ability to practice effective and pragmatic management.
3. To understand the basic concepts of organizational behaviour and able to apply in personal and industrial setup.

5. Course Outcomes

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

Cos	Course Outcomes	Level of Learning domain (Based on Revised Bloom's)
CO1	Explain the fundamental principles and concepts of management.	K2
CO2	Analyze the roles and functions of managers in an organizational context.	K4
CO3	Apply various management approaches and theories to real-world situations.	K3
CO4	Evaluate the impact of organizational behavior on management practices.	K5
CO5	Demonstrate effective leadership and motivation techniques.	K3

6. Correlation of COs with Pos

COs.	P01	P02	P03	P04	P05	P06	P07
CO1	H	M	L	L	L	L	M
CO2	H	H	M	M	M	L	M
CO3	H	M	M	H	M	M	M
CO4	M	H	H	H	H	M	M
CO5	H	H	H	M	H	H	M

H- High; M-Medium; L-Low

7. Course Contents

Unit I: Basics of Management

L-9

Introduction to Management - Development and evolution of management thoughts, nature and functions of management, managerial skills, roles & functions - Contribution of Henry Fayol, Taylor and Elton Mayo - Approaches to Management - Quantitative approach, Behavioural approach, Systems approach, Contingency approach.

Unit 2: Management Functions

L-9

Nature and purpose of planning- Planning process - Types of plans - Objectives - Managing by Objective (MBO) strategies - Management by Exception - Nature and purpose of organizing - Organization structure - Formal and informal groups/ organization - Line and staff authority - Departmentation - Span of control - Centralization and decentralization - Delegation of authority - Staffing - Directing - Organization culture - Elements and types of culture - Control - process and types.

Unit III: Fundamentals of Organizational Behavior

L-9

Organizational Behavior (OB): Concept, nature, conceptual foundations, disciplines that contribute to the field of OB - challenges & opportunities for OB - attitudes & job satisfaction, values and its dimensions - Personality: Concept, nature, types and theories of personality shaping (MBTI and Big Five Model), other personality types - Perception: Concept, nature, process, importance, management and behavioral applications of perception, errors in perception - basics of Emotional Intelligence

Unit IV: Motivation and Leadership

L-9

Motivation: Concept, principles, theories - content, process & contemporary, Monetary and non-monetary motivation, applications of motivation. Leadership: Concept, functions, styles, and theories of leadership-trait, behavioral, and situational- Sources of power - Power centers - Power and Politics- Employee Engagement

Unit V: Group Dynamics and Change Management

L-9

Group Dynamic: Definition of Group, Difference between Group & Team - stages of Group Development, Group Structure, Group Decision Making, understanding work teams - Conflict Management: Conflict Process - Types - Negotiations - Meaning & definition; Negotiations Process- Managing Change, concept of change, change as a natural process, Importance & Causes of change - social, economic, and technological, managing change - Virtual Teams and Remote Work

TOTAL: 45 HOURS

8. Text Books

1. Harold Koontz, "Essentials of Management", Tata McGraw-Hill Education, 2010.
2. Stephen P. Robbins, "Organisational Behaviour", Pearson Education 13/E., 2024.

9. Reference Books

3. Ramesh B Rudani, "Management and Organizational Behaviour", McGraw Hill Book Co., 2012.
4. Keith Davis, "Human Behaviour at Work", -McGraw Hill Book Co., 2009.
5. Laurie Mullins, "Management & Organisational Behaviour", Pearson Education, Seventh Edition 2013.
6. P C Tripathi, P N Reddy, "Principles of Management", TATA 4, 5th Edition, 2012.

Course Code	Course Title	L	T	P	C
2431MG1501	FUNDAMENTALS OF BUSINESS LAW	3	0	0	3

1. Preamble

This course is primarily to study the branch of law which governs and regulates trade and commerce.

2. Prerequisite

Basic knowledge of General Law.

3. Links to Other Courses

Provide a basis to study Industrial Relations and Labour Welfare course and all Law courses.

4. Course Educational Objectives

Through this course the students will be able to: -

1. To give exposure to such laws important and appropriate to a business organization.
2. To identify the fundamental legal principles behind contractual agreements.
3. To examine how businesses can be held liable in tort for the actions of their employees.
4. Understand the legal structure of different forms of business organizations and their responsibilities as an employer.
5. Develop critical thinking through the use of law cases.

5. Course Outcomes

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

Cos	Course Outcomes	Level of Learning domain (Based on Revised Bloom's)
C01	Summaries the different types of contracts and describes	K2
C02	Identify the essentials of the practical implications of the Sale of Goods Act.	K3
C03	Outline the provisions of the Companies Act for all stages of the company and evaluate its recent amendments.	K2
C04	Discuss the various Provisions in Industrial Law.	K6
C05	Outline the framework of the Information Technology Act.	K2

6. Correlation of COs with POs

CO Nos.	PO1	PO2	PO3	PO4	PO5	PO6	PO7
C01	H					H	
C02						H	
C03	H	M	M	H	M		
C04		M	M	H	M	H	
C05	H			H			L

H- High; M-Medium; L-Low

7. Course Contents

Unit I: Indian Contract Act 1872

L-9

Essentials of a valid contract- Void Agreements- Definition of contract- Formation of a contract- performance of contracts- breach of contract and its remedies- Quasi contracts- Contracts of Indemnity - Meaning- nature - Right of Indemnity Holder and Indemnifier Contracts of Guarantee Types of Guarantee- Provisions relating to various types of Guarantee- Surety and Co-surety- Bailment and Pledge.

Unit II: Sale of Goods Act 1930

L-9

Sales contract - Transfer of title and risk of loss - Conditions and Warranties in sales contract- performance of sales contracts- conditional sales and rights of an unpaid seller. Nature of agency – Creation of agency- types of agents- Agent's authority and liability of principal and third party- liability of agents- termination of agency.

Unit III Company Law

L-9

Nature and Definition of a Company, Registration and Incorporation, Memorandum of Association, Articles of Association, Prospectus, Kinds of Companies, Directors: powers and duties, Meetings, Winding up., Recent Amendments in Companies Act 1956 – Labour Codes.

Unit IV: Industrial Law

L-9

Essentials of Factories Act 1948- Companies Act 2013- Minimum Wages Act 1948 - Industrial Disputes Act 1947 - Employee Relations in the IT sector - The Employee's Compensation (Amendment) Act, 2017 -Labour Law - Types.

Unit V: Information Technology Act

L-9

The Information Technology Act-2000 and 2002-Digital Signature - Digital Signature Certificate- Electronic Governance- Electronic Records- Certifying Authorities- Penalty & Adjudication - Introduction to Cyber Laws -Cybercrimes.

TOTAL: 45 HOURS

8. Text Books

1. Kapoor, N. D., "Elements of Mercantile Law", Sultan Chand & Sons, New Delhi, 2006.
2. Akhileswar Pathak, "Legal Aspects of Business", McGraw Hill Education, 5th Edition, 2006.

9. Reference Books

1. Maheshwari S. N. & Maheshwari, "Business Regulatory Framework", Himalaya Publishing House, 2006.
2. Kuchhal, M. C., "Business Law", Vikas Publishing House, New Delhi, 2007.
3. Singh, Avtar, "Company Law", Eastern Book Co. Lucknow, Bharat Law House, Delhi, 2006.
4. Ramaiyya A., "Guide to the Companies Act", 16th edition, Lexis Nexis Butterworths, 2008.

Course Code	Course Title	L	T	P	C
2431MG1502	MANAGERIAL ECONOMICS	3	0	0	3

1. Preamble

This course delves into the intersection of economic theory and business strategy, equipping students with knowledge to navigate complex decision-making scenarios within organizations. Key topics include demand and cost analysis, where students learn to forecast consumer behaviour and optimize production costs. Market structure and pricing discussions explore competitive strategies and profit maximization techniques across various market environments. Overall, managerial economics empowers students to strategically allocate resources, understand market dynamics, and enhance business performance through informed economic analysis.

2. Prerequisite

To know the fundamental concept of economics in various aspects.

3. Links to Other Courses

Fundamental to MBA Programme.

4. Course Educational Objectives

Through this course the students will be able: -

1. To comprehend economic theories and principles so as to render the business so strong and act socially viable.
2. Explain the mechanics of supply and demand in allocating goods and services and resources.
3. Identify relationships between production and costs and define key characteristics and consequences of different forms of markets
4. To understand the process of calculation of national income and various government policies.
5. To gain knowledge on the importance of money and monetary policies.

5. Course Outcomes

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

Cos	Course Outcomes	Level of Learning domain (Based on Revised Bloom's)
C01	Infer the fundamentals of economics	K2
C02	Identify the dynamics of demand and supply.	K3
C03	Examine the various production, cost analysis and Market structure to handle business decisions.	K4
C04	Determine the National Income and various Government Policies	K5
C05	Interpret the role of money and its policy	K5

6. Correlation of COs with POs

Cos	PO1	PO2	PO3	PO4	PO5	PO6	PO7
C01	H	H	M			H	
C02	H	H	M			H	
C03	H	H		H		H	
C04				H			M
C05				H			M

H- High; M-Medium; L-Low

7. Course Contents

Unit I: Introduction

L-9

Introduction: definition of Managerial Economics: Scope of Managerial Economics and other disciplines - Decision making - Basic economic concepts in decision making- Objectives of a firm - the role and responsibility of managerial economist in the business.

Unit II: Demand and Supply Analysis

L-9

Demand Analysis; Law of Demand, Exceptions to the law of Demand, Determinants of Demand. Elasticity of Demand - Price, Income, Cross and Advertising Elasticity; measurement of Elasticity of Demand.; Law of Supply, Supply Elasticity; Analysis and its uses for managerial decision making - Oligopoly - Pricing methods.

Unit III: Production Function

L-9

Production with One Variable Input – Law of Variable Proportions – Production with Two Variable Inputs – Production Isoquants – Iso cost Lines Estimating Production Function - Returns to Scale– Economies Vs Diseconomies of Scale – Cost Concepts – Analysis of cost – Short and long run costs. Market Structure: Perfect and Imperfect Competition – Monopoly, Duopoly, Monopolistic Competition – Pricing Methods.

Unit IV: National Income and Government Policies

L-9

National income - Concepts - circular flow of National Income - National income determination - Calculation of national Income - Aggregate demand and supply - Components of aggregate demand – Savings – Investments - Business Cycle - Role of Fiscal policy - Indian fiscal policies - GST.

Unit V: The Role of Money and Monetary Policy

L-9

Money market - Demand and supply of money - money-market Structure and – Factors determinants of demand and supply of money - Measurement of money supply - Inflation and the impact - reasons for inflation - Types of inflation - The role of fiscal and monetary policy to control inflation - Globalization and its impacts – Cashless Economy and digitalized cash transfers.

TOTAL: 45 HOURS

8. Text Books

1. Mehta, P.L. Managerial Economics”, Sultan Chand and Sons, New Delhi, 2008.
2. Varshney R.L. and Maheshwari K.L., “Managerial Economics”, Sultan Shand & son, 2010.

9. Reference Books

1. Hirschey Mark, “Economics for Managers”, Thomson, India Edition, 2007.
2. Petersen Craig H. et al., “Managerial Economics”, Pearson Education, 2006.
3. Damodaran Suma, “Managerial Economics”, Oxford Press, 2006.
4. Dominick Salvatore, “Managerial Economics”, Oxford Press, 2007.

Course Code	Course Title	L	T	P	C
2431MG1503	QUANTITATIVE TECHNIQUES FOR MANAGERS	3	1	0	4

1. Preamble

This course is designed as an introduction to basic statistical tools and quantitative methods for graduate students in urban planning. These will help you to become more critical consumers of statistical analyses, and to use statistical reasoning in making decisions. As the foundation for more advanced research methodologies and statistical analyses, this introductory course emphasizes developing the necessary skills for expressing statistical ideas in clear simple language, which is an essential skill for effective planning practitioners.

2. Prerequisite

Business Statistics.

3. Links to Other Courses

Research Methodology and Project Work.

4. Course Educational Objectives

Through this course the students will be able: -

1. To develop the conceptual and practical knowledge of the students aimed at the intellectual pursuit of Management administration.
2. To make them to understand methods and processes of statistical analysis.
3. To expose them to the areas of application of knowledge in business firms and industrial organizations.
4. To enable them to acquire the knowledge of various parametric and non-parametric statistical tools.
5. To calculate the variables between correlation and regression.

5. Course Outcomes

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

Co's	Course Outcomes	Level of Learning domain (Based on Revised Bloom's)
CO1	Explain the methods of central tendencies.	K2
CO2	Apply the rules of probability and its distribution.	K3
CO3	Identify the type of sampling techniques, proportions and its sample size.	K3
CO4	Analyze the data using parametric and non-parametric test.	K4
CO5	Evaluate the problem of correlation analysis, regression analysis method of least squares and index numbers.	K5

6. Correlation of COs with POs

CO Nos.	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1		M			M		
CO2	L	M	L		M		
CO3				L			L
CO4						M	
CO5						M	

H- High; M-Medium; L-Low

7. Course Contents

Unit I: Descriptive Measures

L-9, T-3

Introduction to data - Collection of data - Classification of data - tabulation of data - Diagrammatic and graphic presentation of data - Measures of central tendency - Measures of variation and skewness.

Unit II: Introduction to Probability & Probability Distributions

L-9, T-3

Basic Definitions and Rules for Probability - Conditional Probability - Baye's Theorem - Applications of Probability - Probability distributions: Binomial, Poisson, Normal and Uniform distributions.

Unit III: Sampling Distributions

L-9, T-3

Introduction to Sampling Distributions - Sampling Distribution of Mean and Proportion - Sampling Techniques. Estimation: Point and Interval Estimates - Population Parameters of Large Sample (Z-test) and Small Samples (t-test) - Determining the Sample Size.

Unit IV Testing of Hypothesis (Parametric & Non-Parametric Tests)

L-9, T-3

ANOVA One Way and Two-Way Classifications - Chi-square test - Chi-square tests for independence of attributes - Goodness of fit - Sign Test for Paired Data - Rank Sum Test. Kolmogorov-Smirnov Test - Mann - Whitney U-Test - Kruskal Wallis Test.

Unit V: Correlation and Regression

L-9, T-3

Correlation - Rank Correlation - Repeated Rank Correlation - Introduction to Regression - Method of Least Squares - Index Numbers: Laspeyre's Index Numbers, Paache's Index Numbers and Fisher's Index Numbers.

TOTAL: 60 HOURS

8. Text Books

1. Arora P. N. and Arora S., "Statistics for Management", S. Chand Publishing, 5th Edition.

9. Reference Books

1. Aczel A.D. and Sounderpandian J., "Complete Business Statistics", Tata McGraw Hill Publishing Company Ltd., 6th Edition, New Delhi, 2012.
2. Vohra N. D., "Quantitative Techniques in Management", Tata McGraw Hill, 2010.
3. Anderson, Sweeney Williams "Solutions Manual to Accompany An Introduction to Management Science Quantitative Approaches To Decision", Cengage, 12th Edition, 2012.
4. Ken Black, "Applied Business Statistics", Wiley India Edition, 7th Edition, 2012.
5. Dahlia Remler, Gregg Van Ryzin, "Research Methods in Practice", Tata McGraw Hill, 2011.

Course Code	Course Title	L	T	P	C
2431MG1504	ACCOUNTING FOR MANAGEMENT	3	1	0	4

1. Preamble

This course provides an in-depth introduction to accounting, covering its fundamental principles, key concepts, and the role of GAAP and IFRS. Students will learn to prepare and analyse financial statements, including trial balances, final accounts, and cash flow statements. The curriculum addresses emerging topics like Corporate Governance and Sustainability Reporting and includes practical insights into computerized accounting systems. Financial statement analysis, which focuses on various ratios and Dupont Analysis, is a critical component. The course aims to equip students with essential accounting skills and knowledge for the finance and accounting industry.

2. Prerequisite

A foundation/bridge course on accounting.

3. Links to Other Courses

Link to financial and management Accounting.

4. Course Educational Objectives

Through this course the students will be able: -

- To Understand fundamental accounting principles and conventions for accurate financial reporting.
- To Develop skills in financial statement analysis and cash flow management for informed decision-making.
- To Learn contemporary accounting standards and practices, including IFRS and emerging issues.

5. Course Outcomes

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

Cos	Course Outcomes	Level of Learning domain (Based on Revised Bloom's)
CO1	Explain the basics of the accounting system	K2
CO2	Illustrate the Accounting standards and IFRS	K2
CO3	Infer the contents of financial statement	K4
CO4	Evaluate the financial statements.	K5
CO5	Analyze the Codification and Prepackaged Accounting Software	K4

6. Correlation of COs with POs

CO Nos.	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	H	M					H
CO2	H	H		H	H	M	H
CO3	H	H	H	M	M		H
CO4		H		H	H		H
CO5	H	H		M	H	L	H

H- High; M-Medium; L-Low

7. Course Contents

UNIT 1: Introduction to Financial Accounting

L-9, T-3

Introduction to Accounting: Need and Types of Accounting, Users of Accounting, concepts and Conventions of Accounting, Accounting Equation (problems on accounting equation), Generally Accepted Accounting Principles (GAAP). –Trial Balance Preparation of Final Accounts Trading, Profit and Loss Account (P&L) and Balance Sheet

UNIT II: Accounting Standards and IFRS and Emerging Issues in Accounting

L-9, T-3

Accounting Standards and IFRS: Need for accounting standards - IFRS and proposed changes in Indian Accounting Standards. Emerging issues in Accounting: Corporate Governance and clause 49 of the listing agreement, Human Resource Accounting, Forensic Accounting, and Sustainability Reporting -KPI.

UNIT III: Analysis of Financial Statements - I

L-9, T-3

Financial ratio analysis, Interpretation of ratio for financial decisions- Ratio Analysis- solvency ratios, profitability ratios, activity ratios, liquidity ratios, market capitalization ratios, Comparative statements - common size statements, Du Pont Analysis.

UNIT IV: Analysis of Financial Statements - II

L-9, T-3

Analysis of Financial Statements II: Funds Flow Statement: Meaning, Concept of Gross and Net Working Capital, Preparation of Schedule of Changes in Working Capital, Preparation of Funds Flow Statement and its analysis. Cash flow (as per Accounting Standard 3).

UNIT V: Computerised Accounting

L-9, T-3

Significance of Computerized Accounting System- Codification and Grouping of Accounts Maintaining the hierarchy of ledgers- Prepackaged Accounting Software, Introduction of cloud accounting-benefits- utilization of industry - Cloud Banking Software and its application in banking Sector -

TOTAL: 60 HOURS

8. Text Books

1. Narayanaswamy R., "Financial Accounting: A Managerial Perspective", 5th Edition, PHI Learning, 2006.
2. Khan M.Y. & Jain P.K., Management Accounting, Tata McGraw Hill, 8th edition, 2018.
3. Reddy T.S. & Murthy A., Financial Accounting, Margham Publications, 2014.

9. Reference Books

1. Financial Accounting" by Jerry J. Weygandt, Paul D. Kimmel, and Donald E. Kieso, 10th Edition, Wiley
2. Hanif and Mukherjee, "Financial Accounting", 1st Ed., McGraw Hill Education, 2018.
3. Ambrish Gupta, "Financial Accounting for Management: An analytical perspective" Pearson, 2018.
4. Horngren, Sundem, Elliott, & Philbrick, "Introduction to Financial Accounting", Ninth Edition, Prentice Hall, 2006.
5. William S. Hopwood, Jay J. Leiner, and George R. Young, "Forensic Accounting and Fraud Examination", 2nd Edition, McGraw-Hill Education
6. David Russell, William Aiton, "Cloud Accounting - From Spreadsheet Misery to Affordable Cloud ERP", Kindle Edition.

Course Code	Course Title	L	T	P	C
2431MG1505	STARTUPS AND ENTREPRENEURSHIP	3	0	0	3

1. Preamble

This course is to develop entrepreneurial motivation and impart basic entrepreneurial skills and understandings to run a business efficiently and effectively. This course gives insights about the environment that prevail to succeed as an entrepreneur and covers all the aspect to start a small business.

2. Prerequisite

Candidates should have basic knowledge about business to understand this subject

3. Related Courses

Business Ethics & Corporate Social responsibility

4. Course Educational Objectives

Through this course the students will be able: -

1. To know the basic concepts about entrepreneurship, start-up concepts
2. To understand the entrepreneurial environment and the role of family in influencing entrepreneurs
3. To create or generate ideas for business and to formulate a business plan, the ways to evaluate it and present it
4. To appraise the resources needed to start a small business and to study about the taxation benefits and types of investors
5. To make students familiarize with the strategic transition leadership and exit strategy

5. Course Outcomes

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

Cos	Course Outcomes	Level of Learning domain (Based on Revised Bloom's)
CO1	Explain the basic concepts of entrepreneurship and start-up	K2
CO2	Build the entrepreneurial environment and its impact of entrepreneurs.	K3
CO3	Create the ideas for Business Plan Preparation	K6
CO4	Prioritize the resources needed to start a small business.	K5
CO5	Apply the strategy concept of Succession planning for business and exit strategy.	K3

6. Correlation of COs with POs

CO Nos.	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	H	M	L	M		H	H
CO2	M	H	M	H	M	H	L
CO3	H	H	L	M	M	H	H
CO4	L	H		H	M	H	H
CO5	M	H	M		H	H	H

H- High; M-Medium; L-Low

7. Course Contents

Unit I: Introduction

L-9

Entrepreneurship- Definition - Concept-Evolution - Characteristics of Successful Entrepreneur - Entrepreneurial Decision process - Need for Entrepreneurs - Types of Entrepreneurs - Intrapreneur - Technopreneur - Netpreneur - Ecopreneur - Social Entrepreneurship. Start-up - Definition - Types -The Rise of The start-up Economy - The Six Forces of Change – The Entrepreneurial Ecosystem –Entrepreneurship in India. Government Initiatives.

Unit II: Entrepreneurial Environment

L-9

Business Environment - Role of Family and Society Factors affecting Entrepreneur growth - Women Entrepreneurs - Agripreneurship - Entrepreneurship Development Programmes - Central and State Government Policies and Regulations

Unit III: Business Pitch Preparation

L-9

Sources of Business Ideas - Methods of generating ideas - Creative problem solving - Test of feasibility - Business Pitch - Scope - Value - Evaluation - Presentation - Contents of Business Plan - Sample Business Plan

Unit IV: Launching of Small Business

L-9

Finance and Human Resource Mobilization - Institutional finance to entrepreneurs - Institutional support to entrepreneurs - Taxation benefits - Role of Industries / Entrepreneurial association and Self-Help groups - Role of Incubators – Accelerators - Angel Investors - Venture capital

Unit V: Government Schemes for Startups and Entrepreneurship

L-9

Introduction to Government Schemes - Startup India Initiative- Pradhan Mantri Mudra Yojana- Atal Innovation Mission- Stand-Up India Scheme- Credit Guarantee Fund Trust for Micro and Small Enterprises (CGTMSE)- Digital India Initiative for Startups-Startup India Seed Fund Scheme (SISFS)- State-Specific Startup Policies-Challenges and Future Scope.

TOTAL: 45 HOURS

8. Text Book

1. Khanka S.S., "Entrepreneurial Development", S. Chand and Company Limited, New Delhi, 2022.
2. Robert D Hisrich, Michael P Peters, "Entrepreneurship", 11th Ed., McGraw Hill, New Delhi, 2020.
3. Kathleen R Allen, Launching New Ventures, An Entrepreneurial Approach, 8 th Ed CengageLearning, 2023

9. Reference Books

1. Poornima M Charantimath, "Entrepreneurship Development and Small Business Enterprises Pearson, 2nd Edition, 2012
2. Saravanavel P., "Entrepreneurial Development", Ess Pee kay Publishing House, Chennai, 2009.
3. Donald F Kuratko, T.V Rao, "Entrepreneurship: A South Asian perspective", Cengage Learning, 2012.
4. Shilpi Chakravarty, "Basis of Entrepreneurship Development", Amazon Kindle Ed., E- Book, 2017.
5. C B Gupta, "Entrepreneurship Text & Cases" Sultan Chand & Sons, 2022

Course Code	Course Title	L	T	P	C
2437MG5500	RURAL DEVELOPMENT PROGRAMME	0	0	2	1

1.Preamble

Rural development is a unique and vital field, focusing on the improvement of the quality of life and economic well-being of people living in rural areas. Education is a cornerstone in rural development. It empowers individuals with the knowledge and skills needed to break the cycle of poverty and contribute to their community's economic and social growth. Infrastructure such as roads, electricity, water supply, and internet connectivity are crucial. Good infrastructure improves access to markets, education, health care, and other critical services.

2.Prerequisite

Basic understanding about Rural Development

3.Links to Other Courses

Fundamental to Rural Development Planning and Management.

4.Description:

This course is included as an integral part of the curriculum to expose students to rural realities with an emphasis on rural development. The ultimate goal of rural development is to create a more balanced socio-economic landscape, where rural areas are not left behind in the progress of a nation. This rural development programme duration is 30 hours.

5.Course Outcomes:

Upon successful completion of the village visit, students will be able to: -

COs	Course Outcomes	Level of Learning domain (Based on Revised Bloom's)
CO1	Explain the overview of the Rural Development Program	K2
CO2	Identify the objectives of the field study.	K3
CO3	Make use of the observation and data collection of the field study.	K3
CO4	Analyze the problem identification of the field study.	K4
CO5	Interpret the solutions and implementation strategy of the field study.	K5

6.Correlation of COs with POs

CO Nos.	P01	P02	P03	P04	P05	P06	P07
CO1							
CO2	H	M					
CO3					M		
CO4	H	M	H	H			
CO5	H		H				

H- High; M-Medium; L-Low

7. Course Contents

- **Overview of Rural Development Programme** - Meaning – Concept of Rural Development – About UBA.
- **Rural Development Schemes** - Rural Development Schemes like MGNREGA, RSVY, IAY, SGRY in India.
- **Understanding Rural Society through Field Study**
- **Education and Facilities in Rural Areas** - Problems of Schools and College Education. - Community Facilities and Services like Water, sanitation, electricity, housing, etc. - Rural Health Care Services.
- **Field Study Report Writing**

8. Course Rubrics

Evaluation Items	Marks
Rural Diary	10
Qualitative Feedback (Finding Gap)	20
Presentation	20
Rural report	30
Periodic Interaction with Guide	20

Course Code	Course Title	L	T	P	C
2435MG1500	Ability Enhancement Course - I MANAGERIAL COMMUNICATION	1	0	0	1

1. Preamble

This course focuses on essential business communication skills, crucial for effective management and organizational success. It aims to enhance students' abilities in drafting business documents, presenting ideas, and understanding communication dynamics.

2. Prerequisite

Basic knowledge of interpersonal and mass communication.

3. Related Courses

Fundamental for MBA programs and other professional postgraduate disciplines.

4. Course Educational Objectives

Through this course the students will be able: -

1. Understand fundamental communication principles.
2. Develop skills for drafting business documents.
3. Recognize the significance of verbal and non-verbal communication.
4. Apply effective presentation techniques in professional settings.

5. Course Outcomes

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

Cos	Course Outcomes	Level of Learning domain (Based on Revised Bloom's)
CO1	Outline basic communication concepts.	K2
CO2	Develop business documents effectively.	K3
CO3	Explain the role of verbal and non-verbal communication.	K2
CO4	Demonstrate presentation skills.	K2
CO5	Apply communication strategies in real-world scenarios.	K3

6. Correlation of COs with POs

CO Nos.	P01	P02	P03	P04	P05	P06	P07
CO1	H	M					
CO2	H	M					
CO3		M					
CO4				M	M		
CO5	M	H		M	H	M	H

H- High; M-Medium; L-Low

7. Course Contents

Unit I: Introduction to Communication

L-3

Definition and purpose of communication - Key characteristics of effective communication - The role of communication in management - Overview of communication processes and barriers

Unit II: Business Document Preparation

L-3

Principles of clear and concise writing - Drafting routine business letters (inquiries, requests, and responses) - Writing effective business reports and memos - Basics of email communication

Unit III: Fundamentals of Verbal and Non-Verbal Communication

L-3

Principles of effective verbal communication - Importance and interpretation of non-verbal cues - Overcoming common communication barriers - Understanding body language and its impact

Unit IV: Presentation Skills

L-3

Key elements of a successful business presentation - Techniques for designing and delivering presentations - Use of visual aids and multimedia tools - Managing presentation anxiety and engaging the audience, team building and risk taking.

Unit V: Application of Communication Strategies

L-3

Applying communication skills in real-world scenarios - Conducting and participating in meetings effectively - Techniques for successful job interviews and group discussions - Utilizing social media and professional networking tools (e.g., LinkedIn)

TOTAL: 15 HOURS

8. Text Book

1. Chaturvedi P.D, & Mukesh Chaturvedi, "Business Communication: Concepts, Cases and Applications", 2nd Edition, Pearson Education, 2011.

9. Reference Books

1. Lesikar, Flatley, Rentz & Pande, "Business Communication", 11th Edition, TMH, 2010.
2. Mary Ellen Guffey, "Business Communication: Process and Product" 3rd Edition, Cengage Learning, 2002.

Course Code	Course Title	L	T	P	C
2434MG3500	Skill Enhancement Course – I INFORMATION TECHNOLOGY FOR MANAGERS	0	0	2	1

1. Preamble

This course IT for Managers introduces the basic concepts of data processing, preparing documents, and presentations for business needs. Data-driven decision-making in business has grown enormously in the last few years, and today this sector is a multi-billion-dollar industry. This course covers business data processing principles for decision-making in business functions.

2. Prerequisite

This course demands an understanding of the fundamentals of computers in school-level education.

3. Links to Other Courses

This course is linked to IT & Business Analytics elective courses.

4. Course Educational Objectives

Through this course the students will be able to: -

1. To give hands-on experience in word processing and business document preparation using Microsoft Word and to educate budding managers on the features of Microsoft PowerPoint in preparing presentations for business purposes.
2. To create a knowledge base in use of Excel and its basic features in spreadsheet manipulations.
3. To demonstrate the advanced features of Microsoft Excel.
4. To give practical exposure to Google Forms.
5. To create simple databases and generate reports based on analysis and visualizing the data using Python and Tableau software.

5. Course Outcomes

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

Cos	Course Outcomes	Level of Learning domain (Based on Revised Bloom's)
C01	Discover the various tools used under Ms Word	K4, S3
C02	Utilize Ms Power point to make attractive presentations.	K3, S2
C03	Evaluate advance excel tools to solve business problems.	K5, S3
C04	Examine open-source web-based tools for document creation and management.	K4, S3
C05	Assess business analytical and business intelligence tools like python, tableau, power BI and google studio.	K5, S3

6. Correlation of COs with POs

Cos	P01	P02	P03	P04	P05	P06	P07
C01	H			H			H
C02				H			H
C03	H	H		H			H
C04				H			H
C05	H	H		H		L	H

H- High; M-Medium; L-Low

7. Course Contents

1. Drafting Quotation Letter to the Company Using Tables in MS Word	C01
2. Organizational Chart Using Smart Art in MS Word	C01
3. Company Anniversary Invitation Letter Using Mail Merge in MS Word	C01
4. Presentation About Company Profile Using Slide Masters and Transition in MS PowerPoint	C02
5. Employees Pay Roll Calculation Using Conditional Formatting and Pivot Tables	C03
6. Order Tracking Using Vlookup Function	C03
7. Calculation of Mean, Variance, Standard Deviation, Skewness, and Kurtosis Using Statistical Functions in MS Excel	C03
8. Online Survey Using Google Forms	C04
9. Descriptive Analytics Using Python	C05
10. Dashboard Creation Using Tableau	C05
11. Dashboard Creation Using Power BI	C05
12. Data Visualization Using Google Data Studio	C05

TOTAL: 30 HOURS

8. Rubrics for Internal Assessment

Rubrics for evaluation of laboratory experiment

Performance in conducting experiment (5)	Result and Analysis (3)	Viva Voce (3)	Record (4)	Total (15 Marks)
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Rubrics for evaluation of model laboratory test experiment

Performance in conducting experiment (15)	Result and Analysis (5)	Viva Voce (5)	Total (25 Marks)
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9. Rubrics for Semester end Laboratory Examination

Performance in conducting experiment (30)	Result and Analysis (20)	Viva Voce (10)	Total (60 Marks)
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10. Text Books

1. Michael "Price Office in Easy Steps, In Easy Steps", 2019,
2. EMC Education Services, "Data Science and Big Data Analytics Discovering, Analyzing, Visualizing and Presenting Data", Wiley, 2019.
3. Daniel G. Murray, "Tableau Your Data! Fast and Easy Visual Analysis with Tableau Software", Wiley, 2nd Edition, 2016,

11. Reference Books

1. Kalilur. Rahman "Python Data Visualization Essentials Guide", BPB Publications, 2021.
2. Purna Chander Rao. Kathula, "Hands-on Data Analysis and Visualization with Pandas", BPB Publications, 2020.

Course Code	Course Title	L	T	P	C
2433CS1500	Open Elective – I ARTIFICIAL INTELLIGENCE AND CYBER SECURITY	3	0	0	3

1. Preamble

Artificial Intelligence and Cyber Security is one of the most advanced fields of computer science and engineering. In this course students can understand and apply the basic principles of artificial intelligence concepts towards problem solving, understand various cybercrimes and cyber security.

2. Prerequisite

30211MG301 Python Programming

3. Related Courses

To all courses in Machine Learning

4. Course Educational Objectives

Through this course the students will be able to: -

1. To understand the various characteristics of Intelligent agents.
2. To learn the different search strategies in AI.
3. To know about the various applications of AI.
4. To familiarize various types of cyber-attacks and cyber-crimes.

5. Course Outcomes

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

Cos	Course Outcomes	Level of Learning domain (Based on Revised Bloom's)
CO1	Outline the Algorithms of Artificial Intelligence.	K2
CO2	Apply Algorithm to specified application.	K3
CO3	Examine the intelligent Systems And Heuristic Search Techniques	K4
CO4	Identify the applications of Artificial Intelligence.	K3
CO5	Make use of Cyber Security and organizational implications.	K3

6. Correlation of COs with POs

CO Nos.	P01	P02	P03	P04	P05	P06	P07
CO1	L	H					H
CO2		H					H
CO3							H
CO4		H			M		H
CO5				L	M		H

H- High; M-Medium; L-Low

7. Course Contents

UNIT I: Introduction to Artificial Intelligence

L-9

Introduction–Definition – Future of Artificial Intelligence – Characteristics of Intelligent agents– Typical Intelligent Agents – Problem Solving Approach to Typical AI problems.

UNIT II: Problem Solving Methods

L-9

Problem solving Methods – Search Strategies- Uninformed – Informed – Heuristics – Local Search Algorithms and Optimization Problems – Searching with Partial Observations – Constraint Satisfaction Problems – Constraint Propagation – Backtracking Search – Game Playing – Optimal Decisions in Games – Alpha – Beta Pruning – Stochastic Games.

UNIT III: Applications

L-9

AI applications – Language Models – Information Retrieval- Information Extraction – Natural Language Processing – Machine Translation – Speech Recognition.

UNIT IV: Introduction to Cyber Security

L-9

Introduction to Cyber Security: Basic Cyber Security Concepts, layers of security, Vulnerability, threat, Harmful acts, Internet Governance – Challenges and Constraints, Computer Criminals, CIA Triad, Assets and Threat, motive of attackers, active attacks, passive attacks, Software attacks, hardware attacks, Spectrum of attacks, Taxonomy of various attacks, IP spoofing, Methods of defense, Security Models, risk management, cyber Threats- Cyber Warfare, Cyber Crime, Cyber terrorism, Cyber Espionage, Comprehensive Cyber Security Policy.

UNIT V: Cyber Security: Organization Implications

L-9

Introduction, cost of cybercrimes and IPR issues, web threats for organizations, security and privacy implications, social media marketing: security risks and perils for organizations, social computing and the associated challenges for organizations.

TOTAL: 45 HOURS

8. Text Book

1. Russell S. and Norvig P., “Artificial Intelligence: A Modern Approach, Prentice Hall, 3rd Edition, 2009.
2. Nina Godbole and Sunit Belpure, Cyber Security Understanding Cyber Crimes, Computer Forensics and Legal Perspectives, Wiley.
3. Anand Shinde, “Introduction to Cyber Security Guide to the World of Cyber Security”, Notion Press, 2021.

9. Reference Books

1. M. Tim Jones, —Artificial Intelligence: A Systems Approach (Computer Science), Jones and Bartlett Publishers, Inc.; First Edition, 2008.
2. Nils J. Nilsson, —The Quest for Artificial Intelligence, Cambridge University Press, 2009.
3. James Graham, Richard Howard and Ryan Otson, Cyber Security Essentials, CRC Press.
4. Chwan-Hwa(john) Wu, J. David Irwin, Introduction to Cyber Security, CRC Press T&F Group.

Course Code	Course Name	L	T	P	C
	INTRODUCTION TO BUSINESS ANALYTICS	3	0	0	3

1. PREAMBLE

Basics of Functional Analytics is aimed at providing an overall understanding of the introduction to business analytics and a theoretical aid to business decision making. Descriptions of business problems, important analytical techniques that can be deployed by managers in business situations are included in this course.

2. PREREQUISITE

This course demands the understanding of functional areas of business.

3. LINKS TO OTHER COURSES

Data mining and data analytics

4. COURSE EDUCATIONAL OBJECTIVES

Through this course the students will be able to: -

1. To understand the concept of business analytics and its applications in various functional areas of business.
2. To understand the benefits of Human Resource, Supply Chain, Customer, Business Process and Financial Analytics.
3. To understand analytical concepts involved in functional analytics.

5. COURSE OUTCOMES

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

Cs	Course Outcomes	Level of Learning domain (Based on Revised Bloom's)
CO1	Outline the functional roles in analytics	K2
CO2	Apply the uses of human resource and supply chain analytics	K3
CO3	Examine the uses of customer analytics in business.	K4
CO4	Interpret the uses of business process analytics.	K2
CO5	Identify the benefits of financial analytics	K3

6. CORRELATION OF CO's WITH PO's

CO Nos.	P01	P02	P03	P04	P05	P06	P07
CO1	L					H	
CO2		H	L		H	H	H
CO3		H			H	H	
CO4		H		L		H	H
CO5					H	H	H

H- High; M-Medium; L-Low

7. COURSE CONTENTS

UNIT I: INTRODUCTION

L-9

Business Analytics – Goals – Domains of business analytics – Choice making process in business organizations. Business Roles in analytics – First level users – Second level users – Third level users. Functional Analytics – Types of functional analytics – Uses of functional analytics.

UNIT II: HUMAN RESOURCE ANALYTICS AND SUPPLY CHAIN ANALYTICS

L-9

Human Resource Analytics – Uses – Workforce planning – Attrition analysis – Employee performance management – Reward management and incentive design – Talent management and engagement – Employee productivity and training – Compensation and benefits planning – Recruitment analytics – Manpower forecasting. Supply chain Analytics – Uses – Supply network strategy – Working capital analytics – E-finance scorecard – Supplier rating model – SKU rationalization – Spend analytics – Supplier performance analytics – Inventory analytics – Bill of materials analysis.

UNIT III: CUSTOMER ANALYTICS

L-9

Customer Analytics – Uses – Cross product holdings – Product level holdings – Attrition analysis – Churn analysis – Cohort analysis – Cross sell analysis – Customer profitability analysis – Customer Feedback analysis - Prescreen score – Campaign profit score – Lifetime value – New customer analysis – Cross holding analysis – Product offer analysis – Customer spend analysis – Customer risk profile analysis – Social media analytics.

UNIT IV: BUSINESS PROCESS ANALYTICS

L-9

Business Process Analytics – Uses – New business analysis – Fraud analytics – Marketing analytics – Campaign performance analysis – Campaign affinity – Campaign performance analysis – Sales analysis – Yield management – Service resolution analysis – Process re-engineering – Fish bone diagram - Simulation – New operations analytics.

UNIT V: FINANCIAL ANALYTICS

L-9

Financial Analytics – Uses – Measuring financial impact: Product profitability analysis – Cash management – Interest rate risk analytics – Liquidity analytics – Spread analysis – Pricing analytics – Retail credit risk analytics – Mortgage analytics – Insurance analytics.

TOTAL: 45 HOURS

8. TEXT BOOK

1. Dinabandhu Bag, “Business Analytics”, Routledge Taylor and Francis Group, 2017.

9. REFERENCE BOOKS

1. Martin R. Edwards, Kirsten Edwards, “Predictive HR Analytics”, Kogan Page, 2019.
2. Kurt Y. Liu, “Supply Chain Analytics”, Springer International Publishing, 2022.
3. Mark J. Bennett, Dirk L. Hugen, “Financial Analytics with R” Cambridge University Press, 2016.

Course Code	Course Name	L	T	P	C
	SUSTAINABILITY AND ENERGY MANAGEMENT	1	0	0	1

1. Preamble

This course presents a thorough and systematic coverage of sustainable development theory and energy management practices. The course aims to provide fundamental knowledge and exposure to the concepts, theories, and practices in the field of sustainability and energy management.

2. Prerequisite

Basic knowledge of sustainability concepts and energy management.

3. Links to Other Courses

Business Ethics, Corporate Social Responsibility, Functional Electives & Projects.

4. Course Educational Objectives

Through this course the students will be able to;

1. Understand the principles of sustainable development and its functions.
2. Develop an understanding of sustainability frameworks and natural resources.
3. Analyze the strategies pertaining to sustainability and their future trends.
4. Learn about various strategies of energy and its planning.
5. Develop skills for sustainable decision-making in businesses and governance.

5. Course Outcomes

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

Cos	Course Outcomes	Level of Learning domain (Based on Revised Bloom's)
C01	Explain the concepts and approaches of sustainable development.	K2
C02	Outline the various aspects of sustainability. and natural resources.	K2
C03	Identify the strategies and emerging trends in sustainability	K3
C04	Examine the energy management strategies.	K4
C05	Identify the energy conservation technologies	K3

6. Correlation of COs with POs

CO Nos.	P01	P02	P03	P04	P05	P06	P07
C01	H			H			H
C02	H			H			H
C03	H	H		H	L	H	H
C04	H	H		H		H	H
C05	H	H		H		H	H

H- High; M-Medium; L-Low

7. Course Contents

Unit I: Introduction to Sustainable Development

L-9

Meaning and Definition of Sustainable Development, Brief Historical Background of Sustainable Development, Features and Principles of Sustainable Development, Sustainable Development Goals (SDGs), United Nations Global Compact, Significance and Challenges of Sustainable Development

Unit II: Aspects of Sustainability Development and Natural Resources

L-9

Introduction to Sustainability Development, Economic Aspects, Socio-Political Aspects, Ecological (Environmental) Aspects - Meaning of Natural Resources, Classification of Natural Resources, Salient Features of Environment Protection Act 1986, Salient Features of Water Act 1974, Salient Features of Air Act 1981,

Unit III: Strategies and Future Trends in Sustainable Development

L-9

Need to Adopt Sustainable Strategy, Triple-Bottom Line Approach (People, Planet & Profit - 3 BL Approach), Various Strategies for Sustainable Development - Emerging Trends in Sustainability, Role of Digital Transformation in Sustainable Development, Circular Economy and Zero Waste Initiatives, Green Finance and Sustainable Investment Renewable Energy and Technological Innovations,

Unit IV: Energy Management

L-9

Energy Management – Definitions and significance – objectives –Characterising of energy usage – Energy Management program – Energy strategies and energy planning - Energy Audit – Types and Procedure – Optimum performance of existing facilities – Energy management control systems – Computer applications in Energy management.

Unit V: Energy Conservation

L-9

Energy conservation – Principles – Energy economics – Energy conservation technologies – cogeneration – Waste heat recovery – Combine d cycle power generation Energy Conservation Opportunities in residential and commercial buildings – Energy Conservation Measures. Energy Scenario – Global and Indian –Impact of Energy on economy, development and environment, Energy policies, Energy strategy for future.

TOTAL: 45 HOURS

8. Textbooks:

1. Jennifer A. Elliott, An Introduction to Sustainable Development, 4th Edition, Routledge, 2012. ISBN: 978-0415590730.
2. Doty S. and W. C. Turner, Energy Management Hand book, 7/e, Fairmont Press, 2009.

9. Reference Books:

1. Jeffrey D. Sachs, *The Age of Sustainable Development*, Columbia University Press, 2015. ISBN: 978-0231173148.
2. Lisa Benton-Short and John Rennie Short, *Sustainability and Sustainable Development: An Introduction*, Rowman & Littlefield Publishers, 2021. ISBN: 978-1538135365.
3. Rao S. and B. B. Parulekar, *Energy Technology*, Khanna Publishers, 2005.
4. Rai G. D., *Non-conventional Energy Sources*, Khanna Publishers, 2011.

Semester II Course Details

Sl. No.	Course Code	Course Title	Type	L	T	P	C
1.	2431MG1506	Marketing Management	PC	3	0	0	3
2.	2431MG1507	Applied Operations Research	PC	3	1	0	4
3.	2431MG1508	Financial Management	PC	3	1	0	4
4.	2431MG1509	Human Resource Management	PC	3	0	0	3
5.	2431MG1510	Business Research Methods	PC	3	0	0	3
6.	2431MG1511	Operations Management	PC	3	0	0	3
7.	2431MG1512	Business Ethics and Corporate Social Responsibility	PC	3	0	0	3
8.	2433AE1501	Introduction to Airline Industry (Batch 2024-26)	OE	3	0	0	3
	2433CS1502	Big Data Analytics (Batch 2025-27)	OE	3	0	0	3
9.	2435MG1501	Indian Knowledge System	AEC	1	0	0	1
10.	2434MG3501	Professional Proficiency	SEC	0	0	2	1
Total Credits							28

Course Code	Course Title	L	T	P	C
2431MG1506	MARKETING MANAGEMENT	3	0	0	3

1. Preamble

This course provides the importance of marketing as the interface between the organization and the consumer and its potential to generate revenue. The course introduces basic concepts of marketing like buying behavior, product planning and pricing, distribution channel, segmentation, targeting, positioning etc. and how marketers use them to make marketing plans.

2. Prerequisite

The students could have the basic fundamentals of marketing concepts as a prerequisite to this course.

3. Links to Other Courses

This course has links to courses like Integrated Marketing Communications, Consumer Behavior, Sales and Distribution & Retail Marketing.

4. Course Educational Objectives

Through this course the students will be able: -

1. To understand the basic concepts of marketing.
2. To know the buyer attitude towards decision making and the factors affecting decision-making process.
3. To understand product, its branding and pricing concepts.
4. To understand various distribution channel and the basics of Integrated Marketing Communications.
5. To understand the basic fundamentals underlying of CRM, services, rural, digital and international marketing.

5. Course Outcomes

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

Cos	Course Outcomes	Level of Learning domain (Based on Revised Bloom's)
CO1	Outline the scope and philosophies of marketing.	K2
CO2	Identify the segmentation targeting positioning and buying Behaviour	K3
CO3	Examine the concepts of product life cycle, branding and pricing.	K4
CO4	Identify the marketing channels and sales management.	K3
CO5	Make use of contemporary marketing approaches like digital, services, rural, international strategies with CRM.	K3

6. Correlation of COs with POs

CO Nos.	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	H						
CO2		M	M			H	H
CO3	H			H		H	H
CO4	H	M	M	H	M	H	H
CO5	H			H	M		H

H- High; M-Medium; L-Low

7. Course Contents

Unit I: Introduction to Marketing

L-9

Definition of Marketing - Importance and Scope of Marketing - Philosophies of marketing management - Scanning marketing environment - Market Research - Marketing Mix - Introduction to Digital Marketing.

Unit II: STP and Buying Behaviour

L-9

Market segmentation - Targeting and Positioning - Buying population - Key psychological process - Motivation, perception, learning, emotions and memory - Buying decision process - Understanding Industrial and Consumer Buyer Behavior.

Unit III: Product Planning and Pricing

L-9

New Product Development - Product Life Cycle - Product Line & Product Mix - Brand Equity - Building brand equity - Branding Vs Marketing - Packaging, labelling and warranties - Pricing Policies - Pricing Methods - Factors affecting pricing policies.

Unit IV: Marketing Channels and Sales Management

L-9

Channel design - Channel flows - Distribution Management - Retailing - Salesforce - Advertising - Publicity - Personal Selling.

Unit V: Marketing in other areas

L-9

Basics of Customer Relationship Management, Service Marketing, Rural Marketing - Digital Marketing - International Marketing Strategies - Marketing Ethics-AI in Marketing- Machine Learning.

TOTAL: 45 HOURS

2. Text Books

1. Kotler, Kevin Keller, Maired Brady, "Marketing Management: A South Asian perspective" Pearson Education, 14th Edition, 2012.

3. Reference Books

1. Saxena, "Marketing Management", Tata Mcgraw Hill, 4th edition, 2010.
2. Ramaswamy, Namakumari, "Marketing Management: Global Perspective in India" Macmillan India Ltd, 4th edition, 2010.
3. Sherlekar, "Marketing Management", Himalaya Publishing House, 4th edition, 2012.
4. Arun Kumar, Meenakshi, "Marketing Management", Vikas Publishing House, 2nd Ed., 2010.
5. KS Chandrasekar, "Marketing management-Text and Cases", Tata McGraw Hill Education, 2012

Course Code	Course Title	L	T	P	C
2431MG1507	APPLIED OPERATIONS RESEARCH	3	1	0	4

1. Preamble

This course provides an in-depth insight into the concepts, theories, and techniques of Operations Research and Quantitative Techniques and their applications to planning, control, performance which could be successfully used for improving the quality of managerial decisions. This course has adopted a logical mathematical problems and solution approach to explain various aspects of Operations Research.

2. Prerequisite

Basic knowledge of mathematics and develop understanding of mathematical models.

3. Links to Other Courses

Research Methodology and Project Work.

4. Course Educational Objectives

Through this course the students will be able: -

1. Ability to understand and analyze managerial problems in industry more effectively.
2. Knowledge of formulating mathematical models for quantitative analysis of managerial problems in industry.
3. Skills in the use of Operations Research approaches and computer tools in solving real problems in industry.
4. Mathematical models for analysis of real problems in Operations Research.

5. Course Outcomes

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

Cos	Course Outcomes	Level of Learning domain (Based on Revised Bloom's)
C01	Explain the concepts OR and illustrate the methods of transportation and assignment problems.	K2
C02	Solve the Linear Programming problem (LPP).	K3
C03	Construct the network analysis and queuing theory models.	K3
C04	Classify the inventory models with & without shortages and replacement of equipment that fails suddenly.	K4
C05	Analyze the different types of game theory and the decision making problems.	K4

6. CORRELATION OF CO's WITH PO's

CO Nos.	P01	P02	P03	P04	P05	P06	P07
C01	M	H				H	
C02		H					
C03	M	H	M		M		
C04			M			H	L
C05		H		L	M	H	

H- High; M-Medium; L-Low

7. Course Contents

Unit I: Introduction to OR, Transportation & Assignment Models

L-9,T-3

Operation Research - Introduction, OR Models, Areas of Applications – Introduction to Transportation Models - Balanced Transportation Problem - Unbalanced Transportation Problem - Minimization Transportation Problem - Maximization Transportation Problem - The Northwest Corner Rule (NWCR) – The Least Cost Method (LCM) - Vogel's Approximation Method (VAM) - Modified Distribution (MODI) Method – Introduction to Assignment Model - Hungarian Method – Unbalanced Assignment Problem – Maximization in Assignment Problem.

Unit II: Linear Programming Problem

L-9,T-3

Introduction to Linear Programming Problem (L.P.P) - Formulation of L.P. Problem - Graphical Method -- Minimization Graphical Method - Maximization Graphical Method – Introduction to Simplex Method – Maximization Problems – Minimization Problems.

Unit III: Network Analysis & Queuing Theory

L-9,T-3

Construction of Network - Rules & Precautions - C.P.M. & P.E.R.T. - Networks - Obtaining Critical Path - Time estimates for activities - Probability of completion of project - Determination of floats: total, free, independent – Introduction to Queuing Theory - Single and Multi - Channel Models.

Unit IV: Inventory Model and Replacement Models

L-9,T-3

Introduction to Inventory Model – EOQ Model Without Shortages – Manufacturing Model Without Shortages – EOQ Model With Shortages - Manufacturing Model With Shortages - Replacement Models – Replacement of Items that deteriorate whose maintenance costs increase with time without change in the money value - Replacement of items that fail suddenly – Individual replacement policy & group replacement policy.

Unit V: Game Theory and Decision Making:

L-9,T-3

Game Theory - Definition - Saddle Point - Two Person Zero Sum Game - Pure and Mixed Strategies – Graphical Solution - Principle of Dominance – Introduction to Decision Making – Decision Making Under Certainty - Decision Making Under Uncertainty – Decision Making Under Risk – Expected Money Value (EMV) Criterion – Expected Opportunity Loss (EOL) Criterion.

TOTAL: 60 HOURS

8. Text Book

1. Kanti Swarup, P K Gupta, Man Mohan, "Operations Research", Sultan Chand & Sons, 20th Edition, 2023.

9. Reference Books

2. Frederick S. Hillier, Gerald J. Lieberman, Bodhibrata Nag and Preetam Basu, "Introduction to Operations Research", Mc Graw Hill Education (India) Private Limited, 11th Edition, 2023.
3. Bijulal, "Operations Research – Concepts, Problems & Solutions", Ane Books Pvt. Ltd., 1st Edition, 2022.
4. S. Kalavathy, "Operations Research", Vikas Publishing House Pvt. Ltd., 4th Edition, 2013.
5. Prem Kumar Gupta, Dr. D. S. Hira and Aarti Kamboj, "Introduction to Operations Research", S.Chand & Company Ltd., 1st Edition, 2012.

Course Code	Course Title	L	T	P	C
2431MG1508	FINANCIAL MANAGEMENT	3	1	0	4

1. Preamble

This course focuses on the efficient planning, organizing, and control of financial resources. It explores key topics such as the time value of money, capital budgeting, financing decisions, and dividend policies. It also examines corporate restructuring, emphasizing the influence of Environmental, Social, and Governance (ESG) factors on financial decision-making.

2. Prerequisite

A foundation of accounting

3. Links to Other Courses

This course serves as a basis for Strategic Financial Management.

4. Course Educational objectives

Through this course the students will be able to :-

1. Enable students to understand and apply key financial management concepts like time value of money, capital budgeting, and working capital management.
2. Develop skills to assess investment, financing, and dividend decisions, considering capital structure theories.
3. Provide knowledge of corporate restructuring and the role of ESG factors in financial and strategic decisions.

5. Course Outcomes

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

Cos	Course Outcomes	Level of Learning domain (Based on Revised Bloom's)
CO1	Outline the fundamental and time value of financial Management	K2
CO2	Identify the cost of capital for various financing scenarios in the company	K3
CO3	Choose financing decisions and their role in evaluating investment projects.	K3
CO4	Examine the implications of major committee reports on working capital practices.	K4
CO5	Analyze the financial modeling and its impact on dividend policies on share valuation.	K4

6. Correlation of COs with POs

CO Nos.	P01	P02	P03	P04	P05	P06	P07
CO1	H						H
CO2		H	M		H		
CO3	H	H	M	M	H	L	H
CO4		H			H		H
CO5	H	H		M	H		H

H- High; M-Medium; L-Low

7. Course Contents

Unit I: Introduction to Financial Management **L-9, T-3**

Financial Management: meaning, scope, objectives, and functions. Time Value of Money, Valuation of Bonds and Share. Financial Analysis and Control; overview of Indian Financial System: Legal, Regulatory, and tax framework, Introduction to Fin Tech. Basics of Cryptocurrency.

Unit II: Cost of Capital & Leverage **L-9, T-3**

Cost of Capital - Computation for each source of finance and weighted-average cost of capital - EBIT -EPS Analysis - Operating Leverage - Financial Leverage. Dividend Discount Model.

Unit III: Financing Decisions **L-9, T-3**

Investment and Capital Structure Decisions - Net Income Approach - Net Operating Income Approach - MM Approach; Valuation and Rates of Return; Method of Capital Budgeting.

Unit IV: Working Capital Management **L-9, T-3**

Working Capital Management - Definition and Objectives - Working Capital Policies -Factors affecting Working Capital requirements - Forecasting Working Capital requirements- Receivables Management, Inventory Management - Working Capital Financing - Sources of Working Capital and Implications of various Committee Reports.

Unit V: Dividend Policy Decision & Corporate Restructuring **L-9, T-3**

Internal Financing and Dividend Policy - Types of Dividend Policy - Dividend Policy Share Valuation –Corporate Dividend Behaviour. Financial Modelling using AI and advanced risk modelling techniques. Corporate Restructuring-Objectives of Restructuring, Types of Restructuring.

TOTAL: 60 HOURS

8. Text Book

1. Khan. M.Y, Jain.P.K., "Financial Management" – Tata Mc Graw Hill Publications Limited – Fourth Edition- 2004.
2. I.M. Pandey Financial Management -Vikas Publishing House PVT Ltd.

9. Reference Books

1. ArthurJ.Keown. et al, "Financial Management- Principles and applications" Pearson Tenth edition 2005.
2. James C.Vanhorne and JohnM,Wachowicz " Fundamentals of Financial Management" Pearson Education Eleventh edition 2001.
3. Mergers, Acquisitions, and Corporate Restructurings by Patrick A. Gaughan,'Wiley',2015
4. Financial Management by Rajiv Srivastava & Anil Misra, Oxford University Press, Chennai.

Course Code	Course Title	L	T	P	C
2431MG1509	HUMAN RESOURCE MANAGEMENT	3	0	0	3

1. Preamble

This course provides students with the basic principles of human resource management how an organization acquires, rewards, motivates, uses, and generally manages its people effectively. The students may apply the concepts in current work environments. The course will introduce the manager to practices and techniques for evaluating performance, structuring teams, coaching and mentoring people etc.

2. Prerequisite

Basic knowledge of Organizational Behaviour and Principles of Management

3. Links to Other Courses

Talent Management, Performance Management, Labour Management.

4. Course Educational objectives

Through this course the students will be able to:-

1. To provides a foundation in human resource management concepts, process and strategy.
2. To enable the students to build a career in HR.
3. It enables the students to understand the importance of training and development.
4. To impart theoretical knowledge and practice in the area of performance management.
5. To solve the issues in current work environment.

5. Course Outcomes

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

Cos	Course Outcomes	Level of Learning domain (Based on Revised Bloom's)
C01	Outline the importance of human resource management.	K2
C02	Classify human resources planning in recruitment and selection process.	K2
C03	Examine the training requirements to the individual and organizational development.	K4
C04	Develop the performance-based compensation plan.	K3
C05	Select the appropriate performance evaluation techniques.	K3

6. Correlation of COs with POs

CO Nos.	P01	P02	P03	P04	P05	P06	P07
C01	M						M
C02		H	H	M		M	M
C03	M	H				M	
C04			H		M		
C05		H	H	M	M		

H- High; M-Medium; L-Low

7. Course Contents

Unit I Introduction

L- 9

Evolution of Human Resource Management - The importance of the human factor - Challenges -Inclusive growth and affirmative action - Role of human resource manager - ESG (Environmental, Social, and Governance) considerations in HR policies and sustainable human resource management -Integration of artificial intelligence and machine learning in HR processes and decision-making - Human re- source accounting and audit - Introduction to HRIS.

Unit II Human Resource Planning

L-9

Importance of Human Resource Planning - Forecasting human resource requirement - matching supply and demand - Internal and External sources. Recruitment – Selection- Strategies for managing distributed teams and virtual recruitment processes, Moving beyond traditional qualifications to focus on competencies and potential - Induction – Applicant Tracking System (ATS)

Unit III Training and Executive Development

L-9

Types of training methods-purpose - benefits - resistance. Executive-development programmes-Self-development –Knowledge management, Microlearning and Digital Learning Experience Platforms (LXPs) for employee development, Upskilling and Reskilling Programs for Digital Transformation and Industry 4.0 (Talent Acquisition)

Unit IV Sustaining Employee Interest

L-9

Introduction to Compensation plan - Personalized Total Rewards Systems and Flexible Benefits in the Age of Multi-generational Workforce – Gig Economy - Motivation - Application of theories of motivation - Career management - Career Mobility Framework - Development of mentor - Protégé relationships - HR Work Day, Employee Well-being and Mental Health Programs in the Modern Workplace- Employee Engagement in Digital Era.

Unit V Performance Evaluation and Control Process

L-9

Method of performance evaluation - Continuous Performance Management and Real-time Feedback Systems, Data-Driven Performance Metrics and People Analytics for Objective Evaluation - Industry practices - Promotion, Demotion, Transfer and Separation - Implication of job change - The control process - Importance - Methods - Requirement of effective control systems grievances - Causes - Implications - Redressal methods – Exit Strategy.

TOTAL: 45 HOURS

8. Text Book

1. Gary Dessler, “Human Resource Management”, Pearson Education Limited, 2007.

9. Reference Books

1. Luis R.Gomez-Mejia, David B.Balkin, Robert L Cardy. “Managing Human Resource”, PHI Learning, 2012.
2. Decenzo and Robbins,” Human Resource Management”, Wiley, 8th Edition, 2007.
3. Bernadin,”Human Resource Management”, Tata McGraw Hill, 8th edition, 2012.
4. Wayne Cascio, “Managing Human Resource”, McGraw Hill, 2007.
5. Ivancevich, “Human Resource Management”, McGraw Hill, 2012.

Course Code	Course Title	L	T	P	C
2431MG1510	BUSINESS RESEARCH METHODS	3	0	0	3

1. Preamble

This course introduces students to the principles and processes of conducting systematic business research, emphasizing the development of theoretical and practical skills in research design and data analysis.

2. Prerequisite

Basic concepts of quantitative techniques.

3. Links to Other Courses

Marketing Research, Summer Internship and Final Project.

4. Course Educational objectives

Through this course the students will be able: -

1. Understand the fundamentals of business research, including problem identification, hypothesis formulation, and the role of theory.
2. Develop skills to design, execute, and interpret research outcomes for business decision-making

5. Course Outcomes

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

Cos	Course Outcomes	Level of Learning domain (Based on Revised Bloom's)
C01	Explain the significance of business research and describe its process.	K2
C02	Identify appropriate research designs and measurement techniques.	K3
C03	Apply data collection methods for analyzing business problems.	K3
C04	Examine statistical techniques to interpret research data.	K4
C05	Summarize and communicate research findings effectively.	K2

6. Correlation of COs with POs

CO Nos.	PO1	PO2	PO3	PO4	PO5	PO6	PO7
C01					H		H
C02		H			H		H
C03	H	H					H
C04	H	H			H		H
C05	H	H			H		H

H- High; M-Medium; L-Low

7. Course Contents

Unit I: Introduction L-9

Business Research – Definition and Significance – the research process – Types of Research – Research questions - Problems – Research objectives-formulation of hypotheses - the role of theory in research - verifying theory-theory building

Unit II: Research Design and Measurement L-9

Research design - Definition - types of research design –exploratory, descriptive and causal research design - Research Concepts, Constructs, Propositions, and Variables - Measurement and scaling -Different scales - Construction of instrument - Validity and Reliability of instrument.

Unit III: Data Collection L-9

Types of data - Primary Vs Secondary data - Methods of primary data collection - Survey Vs Observation - Experiments - Construction of questionnaire and instrument - Validation of questionnaire - Sampling plan - Sample size - determinants optimal sample size - sampling techniques - Probability Vs Non-probability sampling methods.

Unit IV: Data Analysis and Interpretation L-9

Data Preparation - editing - Coding - Data entry - Validity of data – Univariate / Bivariate [Correlation-Regression-Chi Square, ANOVA]/ Multivariate Data analysis [Factor Analysis-Cluster Analysis-Multiple Regression-Discriminate Analysis, - Conjoint Analysis].

Unit V: Report Design, Writing and Ethics in Business Research L-9

Research report - Different types - Contents of report - need of executive summary - Chapterization - contents of chapter - report writing - report format - ethics in research - significance of plagiarism, references and citation in research.

TOTAL: 45 HOURS

8. Text Book

1. Naval Bajpai, “Business Research Methods”, Pearson, 2nd Edition, 2017.

9. Reference Books

2. Alan Bryman and Emma Bell, “Business Research methods”, Oxford University Press, 3rd Edition, New Delhi, 2011.
3. Uma Sekaran and Roger Bougie, “Research methods for Business”, Wiley India, New Delhi, 5th Edition, 2012.
4. William G Zikmund, Barry J Babin, Jon C. Carr, Atanu Adhikari, Mitch Griffin, “Business Research methods - A South Asian Perspective”, Cengage Learning, New Delhi, 8th Edition, 2012.
5. Donald R. Cooper, Pamela S. Schindler and J K Sharma, “Business Research methods’, Tata Mc Graw Hill, New Delhi, 11th Edition, 2012.
6. Panneerselvam. R, “Research Methodology”, PHI Learning, 2nd Edition, 2014.
7. Prahlad Mishra, “Business Research Methods”, Oxford University Press, First Edition, New Delhi, 2015.
8. Kothari C.R. & Gaurav Garg, “Research Methodology Methods and Techniques”, New Age International, 4th Edition, 2019.

Course Code	Course Title	L	T	P	C
2431MG1511	OPERATIONS MANAGEMENT	3	0	0	3

1. Preamble

This course focuses on planning, designing, managing, and optimizing processes and systems that transform resources into high-value goods and services. It equips decision-makers with the tools and insights to enhance operational efficiency, improve quality, and drive organizational excellence.

2. Prerequisite

A foundational understanding of business concepts, including basic economics, organizational behavior, and statistics, is recommended. A proactive mindset and problem-solving attitude will help students grasp and apply operational strategies effectively.

3. Links to Other Courses

All specializations related to production management

4. Course Objectives

Through this course the students will be able to: -

1. To develop an understanding of the principles and strategies of operations management, including its role in achieving organizational efficiency and competitive advantage.
2. To equip learners with forecasting, facility planning, and project management tools such as PERT, CPM, and JIT for effective decision-making and operational optimization.
3. To analyze and apply international operations strategies, including sourcing, outsourcing, lean production, and global supply chain management, to address modern business challenges.

5. Course Outcomes

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

Cos	Course Outcomes	Level of Learning
CO1	Outline the fundamentals and strategic role of operations management.	K2
CO2	Apply forecasting methods to predict demand effectively and support operational planning across different time horizons.	K3
CO3	Plan efficient facility locations and layouts for productivity.	K3
CO4	Utilize project management principles, including PERT, CPM, and just-in-time systems, to plan, schedule, and control projects effectively.	K3
CO5	Analyze strategies for managing international operations and efficiency	K4

6. Correlation of COs with POs

CO Nos.	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1							
CO2	H	H		M	H	H	
CO3	H	H	M	M	H	H	
CO4	H	H	M		H		H
CO5					H	H	H

H- High; M-Medium; L-Low

7. Course Contents

Unit I: Introduction to Operations Management

L-9

Nature of Operations Management - Operations Management and Competitive Advantage - Scope of Operations Management - Production Management and Operations Management - Decision making in Operations management – Strategic Issues in Operations Management - Sourcing and Vertical Integration - Standardization of Production Facilities – Contract Manufacturing - Strategic Role of Foreign Plants - Supply Chain Management – Emerging Trends in Operations Management.

Unit II: Demand Forecasting in Operations Management.

L-9

Need of Demand Forecasting - Forecasting Time Horizons - Types of Forecasts - Features to forecasts - Elements of a Good Forecast - Objectives of Demand Forecasting - Short Range Objectives - Medium or Long-Range Objectives - Steps in the Forecasting Process - Overview of Quantitative Methods - Time Series Forecasting Methods - Decomposition of a Time Series - Techniques for Averaging - Trend Projection Method (TPM) - Causal Forecasting Methods - Economic Forecasting Model.

Unit III: Facility Location and Facility Layout.

L-9

Facility Location: Introduction - Freedom of Location - Strategic Issues - Need for Location - Errors in Selection - Steps in Location Selection - Deciding on Domestic or International Location - Selection of Region - Selection of the Site - Relative importance of Location Factors - Village - Suburban or City Site - Location Models. Facility Layout: Meaning - Definition and Scope - Objectives of a Good Layout - Factors Influencing facility Layout- Principles of Layout Types of Layout.

Unit IV: Project Management.

L-9

Project Management - Nature of Projects, Project Life Cycle - Importance of Project Management - Project Organization Key Decisions in Project Management - The Role of a Project Manager - Project Planning and Control Techniques - Project Planning - Project Scheduling - Project Control - Network Fundamentals - Programme Evaluation & Review Technique (PERT) - Critical Path Method - Materials Planning - Just-In-Time Systems.

Unit V: International Operations Management

L-9

International Operations Management Compared with Domestic Operations Management - Sourcing and Vertical Integration - Arguments to Make and to Buy – Outsourcing - Facilities Location - Country Factors - Technology Factors - Product Factors - Government Policies - Organizational Issues - Recent Trends in Location - Standardization of Production Facilities - World Class Manufacturing- Lean production.

TOTAL: 45 HOURS

8. Text Book

1. Aswathappa K and Shridhara Bhat K, "Production and Operations Management", Himalaya Publishing House, Revised Third Edition, 2024.

9. Reference Books

1. William J Stevenson, "Operations Management", Tata McGraw Hill, 9th Edition, 2009.
2. Russel and Taylor, "Operations Management", Wiley, Fifth Edition, 2006.
3. Kanishka Bedi, "Production and Operations Management", Oxford University Press, 2004.
4. Pannerselvam R, "Production and Operations Management", Prentice Hall India, Second Edition, 2008.
5. Richard B. Chase, Ravi Shankar, F. Robert Jacobs, Nicholas J. Aquilano, "Operations and Supply Management", Tata McGraw Hill, 12th Edition, 2010.

Course Code	Course Title	L	T	P	C
2431MG1512	BUSINESS ETHICS AND CORPORATE SOCIAL RESPONSIBILITY	3	0	0	3

1. Preamble

The globalization of business along with greater advances in technology has increased the complexity of ethical decision making in business. The purpose of this course is to help students improve their ability to make ethical decisions in business by providing them with a framework that they can use to identify, analyze, and resolve ethical issues in business decision making

2. Prerequisite

Principles of Management, Business Strategy and International Business Management

3. Related Courses

All the functional areas of Management

4. Course Educational Objectives

Through this course the students will be able: -

1. Learn to identify common ethical issues in business
2. Analyze and understand how businesspeople make ethical decisions and handle ethical issues
3. Learn about specific measures companies can take to build effective ethics programs
4. Understand major global ethics issues taking place in international business
5. Become familiar with how firms evaluate social responsibility activities.

5. Course Outcomes

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

Cos	Course Outcomes	Level of Learning domain (Based on Revised Bloom's)
CO1	Explain the overview of business ethics and CSR.	K2
CO2	Select the various CSR Issues and Human Rights	K3
CO3	Make use of CSR and Consumer Protection on Social Responsibility of Business	K3
CO4	Organize Ethics in International Business and its legal Compliance	K3
CO5	Analyze the ethical issues of leading companies using Case Study	K4

6. Correlation of COs with POs

CO Nos.	P01	P02	P03	P04	P05	P06	P07
CO1	M						
CO2	M	H	M			M	
CO3				H	M		H
CO4		H		H	M		H
CO5		H	M	H		M	H

High; M-Medium; L-Low

7. Course Contents

Unit I: Overview of Business Ethics & CSR

L-9

Definition & nature of Business ethics and CSR - Ethical and CSR problems in management in India - Ethical theories, Causes of unethical behavior & Ethical abuses; - Management of Ethics - Ethics analysis - Homer model

Unit II: CSR Issues

L-9

Environmental issues; balanced global environment Kyoto protocol of global warming, judicious use of natural resources. - Social issues; - Ethics and human rights - Social responsibility of a business firm; Social responsibility of business stakeholder's response of Indian firms towards CSR.

Unit III: Social Responsibility of Business

L-9

CSR and Consumer Protection: Consumerism, unethical issues in functional aspects of management: sales, marketing and technology etc.; Ethics in practice - professional ethics for functional managers; impact of ethics on competitive strategy - Cost-benefit analysis of corporate social responsibility and good corporate citizenship - CSR and environmental concerns - CSR and Sustainable Development - CSR through Triple Bottom Line in Business.

Unit IV: Ethics in International Business

L-9

Role of international trade and business organizations in developing business ethics and CSR, Legal compliance - Sarbanes Oxley Act (SOX) - Home and host country's regulations and compulsions of international agencies.

Unit V: Case Analysis

L-9

Case analysis top five successful and failure companies (leading corporate) in India

TOTAL: 45 HOURS

8. Text Books

1. Khanka S.S., "Business Ethics and Corporate Social Responsibility", S. Chand Company and Pvt. Ltd., 1st Edition, 2014.

9. Reference Books

1. Larue Tone Hosmer, "The Ethics of Management", Richard D. Irwin Inc., 2010.
2. Luura P. Hartman Joe DesJardins, "Business Ethics", Mc Hill Education, 2013.
3. Joseph A. Patrick and John F. Quinn, "Management Ethics - integrity at work" Response Books: New Delhi, 1997.
4. Shaw W.H., "Business Ethics", Cengage Learning, 2016.
5. Sturtevant, F.D. "Business and Society" A Managerial Approach, 1990.
6. Murthy C.S.V, "Business Ethics- Text and Cases", Himalayan Publishing House, 2010.

Course Code	Course Title	L	T	P	C
2433AE1501	INTRODUCTION TO AIRLINE INDUSTRY	3	0	0	3

1. Preamble

This course provides the importance of marketing as the interface between the organization and the consumer and its potential to generate revenue. The course introduces basic concepts of marketing like buying behavior, product planning and pricing, distribution channel, segmentation, targeting, positioning etc. and how marketers use them to make marketing plans.

2. Prerequisite

The students could have the basic fundamentals of Airline operations and functional concepts as a prerequisite to this course.

3. Links to Other Courses

This course has links to courses like Integrated Airline operations, Consumer Behavior, and Airline Management.

4. Course Educational Objectives

Through this course the students will be able: -

1. To understand the basic concepts of Airline Industry.
2. To know the factors that influence airline industry.
3. To understand key players in aircraft sector.
4. To understand various regulatory frameworks of the airline Industry.
5. To understand various challenges as well as opportunities presented by emerging technologies

5. Course Outcomes

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

Cos	Course Outcomes	Level of Learning domain (Based on Revised Bloom's)
CO1	Explain the historical development and structure of the airline industry.	K2
CO2	Analyze the economic factors influencing airline profitability and competitiveness.	K4
CO3	Explain the role of key players (airlines, airports, government, air traffic control) in the aviation ecosystem.	K2
CO4	Evaluate the impact of regulatory frameworks on airline operations and passenger experience.	K5
CO5	Assess the challenges and opportunities presented by emerging technologies and sustainability initiatives.	K5

6. Correlation of COs with POs

CO Nos.	P01	P02	P03	P04	P05	P06	P07
CO1	H						
CO2		M	M			H	H
CO3	H			H		H	H
CO4	H	M	M	H	M	H	H
CO5	H			H	M		H

H- High; M-Medium; L-Low

7. Course Contents

Unit I: Airline Industry Overview

L-9

History of aviation, types of airlines (full-service, low-cost, hybrid, ultra-low-cost) - Airline alliances, code-sharing agreements, interline agreements - Airline business models (network carriers, point-to-point, low-cost carriers) - Airline revenue models (passenger, cargo, ancillary revenue)

Unit II: Airline Operations

L-9

Aircraft types and configurations (narrow-body, wide-body, regional jets) - Flight operations (departure, cruise, arrival) - Air traffic management (ATC) system, - Airport operations (terminal operations, baggage handling, ground transportation) - Airline maintenance (line maintenance, heavy maintenance)

Unit III: Airline Economics and Finance

L-9

Airline cost structure (fixed costs, variable costs) - Revenue management, yield management, pricing strategies - Airline profitability and financial analysis - Airline accounting and reporting - Airline taxation and regulation - Airline financing (debt, equity, leasing).

Unit IV: Airline Industry Environment

L-9

International Civil Aviation Organization (ICAO), International Air Transport Association (IATA) - National aviation authorities and regulations - Safety regulations (ICAO Annexes, national regulations) - Security regulations (aviation security, passenger screening)

Unit V: Emerging Trends and Challenges

L-9

Digitalization and technology (e-commerce, mobile apps, AI, blockchain) - Customer experience management (loyalty programs, service quality) - Airline distribution (direct channels, indirect channels, GDS) - Sustainability initiatives (carbon emissions reduction, biofuels)

TOTAL: 45 HOURS

8. Reference Books

1. Cross, R. (2016). The airline business: An introduction. Routledge.
2. Windrum, P. (2014). The economics of airline markets. Cambridge University Press.
3. Doganis, R. (2002). The airline business. Routledge. IATA publications and reports.

Course Code	Course Title	L	T	P	C
2433CS1502	BIG DATA ANALYTICS	3	0	0	3

1. Preamble

This course covers foundational techniques and tools required for data science and big data analytics. This course includes the most significant technologies used for manipulating, storing, and analyzing big data. In addition, the basic tools of big data analytics will be explored. These tools make the students to understand the strategies involved in Big Data Platform.

2. Prerequisite

Basic knowledge on Information Technology for Managers

3. Links to Other Courses

Basic knowledge on Information Technology for Managers

4. Course Educational Objectives

Learners are exposed to:

- Differentiate traditional data processing with Big Data Analytics
- Implement MapReduce programs for processing big data
- Solve distributed computing challenges with the help of MongoDB
- Explore PIG and HIVE tools for Big data analytics
- Perform essential operations for data sharing using Spark RDD

5. Course Outcomes

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

Cos	Course Outcomes	Level of Learning domain (Based on Revised Bloom's)
CO1	Compare traditional data processing with Big Data Analytics	K2
CO2	Identify MapReduce programs for processing Big Data	K3
CO3	Solve distributed computing challenges with the help of MongoDB	K3
CO4	Experiment with PIG and HIVE tools for Big data analytics.	K3
CO5	Organize essential operations for data sharing using Spark RDD	K3

6. Correlation of COs with POs

CO Nos.	P01	P02	P03	P04	P05	P06	P07
CO1		H					
CO2		H			H		H
CO3	M	H		M		H	H
CO4	M	H		M	H	H	H
CO5		H	L		H	H	H

H- High; M-Medium; L-Low

7. Course Contents

UNIT I: INTRODUCTION TO BIG DATA

L-9

Introduction – Classification of Digital Data - Distributed file system – Big Data and its importance - Four V's - Big data applications - Traditional Business Intelligence (BI) versus Big Data - Challenges of Big Data.

UNIT II: BIG DATA USING HADOOP & MAP REDUCE

L-9

Introducing Hadoop - RDBMS Vs Hadoop - History of Hadoop - Hadoop overview - Use case of Hadoop - HDFS (Hadoop Distributed File System) - Processing data with Hadoop - Managing resources and applications with Hadoop YARN (Yet Another Resource Negotiator) - Introduction to Map Reduce Programming – Mapper – Reducer – Combiner – Partitioner – Searching - Sorting - Compression.

UNIT III: NOSQL, MONGODB & CASSANDRA

L-9

NoSQL: Types of NoSQL Databases - Advantages of NoSQL - SQL versus NoSQL – NewSQL - Comparison of SQL - NoSQL and NewSQL - Introduction to MongoDB - Using JSON - Creating or Generating a Unique Key - Terms used in RDBMS and MongoDB - Data Types in MongoDB – CRUD: Commands- Arrays - MapReduce Functions. Introduction to Cassandra: Features, CQL, CQLSH, CRUD - Comparisons of DB.

UNIT V: PIG AND HIVE

L-9

Introduction to Hive: Hive Architecture - Hive data types - Hive file formats - Hive Query Language (HQL) - RC File implementation - User Defined Function (UDF) - Introduction to Pig: Anatomy of Pig - Pig on Hadoop - Pig Philosophy - Use case for Pig - Pig Latin Overview - Data types in Pig - Running Pig - Execution Modes of Pig - HDFS Commands - Relational Operators - Eval Function - Complex Data Types - Piggy Bank - User Defined Function - Pig Vs Hive.

UNIT V: SPARK

L-9

Introduction to Spark: Evolution of Apache Spark - Features of Apache Spark - Spark Built on Hadoop - Components of Spark - Resilient Distributed Datasets - Iterative Operations on MapReduce - Data Sharing using Spark RDD - Interactive Operations on Spark RDD.

TOTAL: 45 HOURS

8. Text Books:

1. Seema Acharya and Subhashini Chellappan “Big data and Analytics” Wiley India Publishers, 2nd Edition, 2019.
2. Rajkamal and Preeti Saxena, “Big Data Analytics, Introduction to Hadoop, Spark and Machine Learning”, McGraw Hill Publication, 2019.

9. Reference Books:

1. Adam Shook and Donald Mine, “MapReduce Design Patterns: Building Effective Algorithms and Analytics for Hadoop and Other Systems” - O'Reilly 2012
2. Tom White, “Hadoop: The Definitive Guide” 4th Edition, O'reilly Media, 2015.
3. Thomas Erl, Wajid Khattak, and Paul Buhler, Big Data Fundamentals: Concepts, Drivers & Techniques, Pearson India Education Service Pvt. Ltd., 1st Edition, 2016
4. John D. Kelleher, Brian Mac Namee, Aoife D'Arcy -Fundamentals of Machine Learning for Predictive Data Analytics: Algorithms, Worked Examples, MIT Press 2020, 2nd Edition

Course Code	Course Name	L	T	P	C
2435MG1501	INDIAN KNOWLEDGE SYSTEM	1	0	0	1

1. Preamble

This course provides a comprehensive understanding of the Indian Knowledge System (IKS) by exploring its historical, philosophical, scientific, and socio-economic dimensions. The course aims to introduce students to the vast intellectual traditions of India, including philosophy, linguistics, sciences, health systems, architecture, and governance.

2. Prerequisite

Basic knowledge of Indian history, philosophy, and traditional knowledge systems is recommended.

3. Links to Other Courses

Philosophy and Ethics, Indian Culture and Civilization, Governance and Public Administration, Ancient Indian Science & Mathematics, Traditional Healthcare Systems (Ayurveda & Yoga).

4. Course Educational Objectives

Through this course the students will be able to;

1. Understand the foundational principles and structure of the Indian Knowledge System.
2. Analyze the philosophical and scientific contributions of ancient India across various disciplines.
3. Explore the influence of IKS in healthcare, governance, linguistics, and mathematics.
4. Examine the epistemological frameworks (Pramāṇa) and logical reasoning methods used in Indian traditions.
5. Apply IKS principles in modern disciplines such as management, sustainability, and digital technologies.

5. Course Outcomes

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

Cos	Course Outcomes	Level of Learning domain (Based on Revised Bloom's)
C01	Explain the fundamental concepts of the Indian Knowledge System.	K2
C02	Outline the philosophical, scientific, and literary traditions of IKS.	K2
C03	Identify key principles of IKS in contemporary applications	K3
C04	Analyze the epistemological and logical frameworks of Indian traditions.	K4
C05	Apply IKS-based approaches to problem-solving in governance, health, and technology.	K3

6. Correlation of COs with POs

CO Nos.	P01	P02	P03	P04	P05	P06	P07
C01	H			M			H
C02			M				H
C03	H	M				M	H
C04			M			M	H
C05	H	M		M	L		H

H- High; M-Medium; L-Low

7. Course Contents

Unit I: Introduction to Indian Knowledge System

L-3

Definition and Importance of IKS, Historical Evolution of IKS, Structure and Organization of IKS, Salient Features and Relevance in Modern Times

Unit II: Philosophical & Wisdom Traditions

L-3

Overview of Indian Philosophical Systems , Key Schools: Sāṅkhya, Yoga, Nyāya, Vaiśeṣika, Pūrva-Mīmāṃsā, Vedānta ,Jaina, Buddhist, and Cārvāka Philosophies, Vedic and Itihāsa Wisdom: Purāṇas, Nīti-śāstra & Subhāṣita

Unit III: Knowledge Systems & Sciences

L-3

Classification of Knowledge in Indian Traditions, Vaiśeṣika Framework: Dravyas, Attributes & Actions, Pramāṇa – Means of Valid Knowledge & Logical Frameworks, Ancient Indian Linguistics: Sanskrit Grammar & NLP Applications, Number Systems & Indian Mathematics: Bhūta-Saṃkhyā & Kaṭapayādi

Unit IV: Health, Wellness & Architecture

L-3

Āyurveda: Principles of Health & Wellness , Sapta-dhātavaḥ, Tri-doṣa, and Psychological Well-being , Daily Wellness Practices: Dinacaryā & Sleep Patterns , Town Planning & Architecture: Vāstu-śāstra & Temple Designs

Unit V: Governance and Public Administration

L-3

Introduction to Raja Dharma, Arthaśāstra & Elements of a Kauṭilyan State, Role of King, Amātya, Janapada & Treasury (Kośa), Danda & Administrative Setup, Public Administration in Epics

TOTAL : 15 HOURS

8. Text book

1. Mahadevan, B., Bhat Vinayak Rajat, Nagendra Pavana R.N. (2022), "Introduction to Indian Knowledge System: Concepts and Applications", PHI Learning Private Ltd. Delhi.

9. Reference Books:

1. Pride of India- A Glimpse of India's Scientific Heritage edited by Pradeep Kohle et al. Samskrit Bharati (2006).
2. Vedic Physics by Keshav Dev Verma, Motilal Banarsidass Publishers (2012).
3. India's Glorious Scientific Tradition by Suresh Soni, Ocean Books Pvt. Ltd. (2010).

Course Code	Course Name	L	T	P	C
2434MG3501	PROFESSIONAL PROFICIENCY	0	0	5	1

1. Preamble

This course is designed to develop quantitative aptitude, logical reasoning, verbal proficiency, and professional communication skills. It integrates mathematical principles for financial problem-solving, enhances critical thinking and analytical abilities, and strengthens language comprehension and reasoning techniques.

2. Prerequisite

The students should have a basic understanding of fundamental mathematics, logical reasoning, and English language proficiency will be useful in better comprehension and application of concepts.

3. Program Educational Objectives

1. Develop problem-solving skills using mathematical principles, including financial calculations, ratios, and proportions.
2. Apply analytical thinking to solve problems through pattern recognition, coding- decoding, and decision-making strategies.
3. Build proficiency in language structures, vocabulary, and reasoning techniques for effective professional and academic communication.
4. Equip students with essential career skills, including resume writing, interview etiquette, and group discussions, fostering self-assessment and confidence.

1. Course Outcomes

Cos	Course Outcomes	Level of Learning domain (Based on Revised Bloom's)
CO1	Apply mathematical principles to solve financial problems.	K3
CO2	Examine the quantitative problems and evaluating relationships.	K4
CO3	Categorize logical reasoning and analyzing patterns for decision-making	K4
CO4	Make use of language structures and applying verbal reasoning techniques.	K3
CO5	Assessing self-competencies and creating professional documents.	K5

6. Correlation of COs with POs

CO Nos.	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	H	H					
CO2	H	H		M			
CO3	H	H					
CO4		H		M			
CO5		H	H	H	H	M	

H- High , M – Moderate , L - Low

7. course Contents

Unit – 1

P-6

Percentage (1), Profit and Loss (1), Coding and Decoding (1), Direction (1)
Blood Relation (1), Simple Interest (1), Compound Interest (1)

Unit – 2

P-6

Ratio and Proportion (1), Ages and Partnership (2), Visual Reasoning (1)

Unit – 3

P-6

Numbers system (1), Time and Work (1), Pipes and Cistern (1), Syllogism (2)

Unit – 4

P-6

Parts of Speech (1), Tenses (1), Verbal Analogy (1), Odd Word Out (1), One-word Substitute (1)

Unit – 5

P-6

Resume Building (2), Interview Etiquette (1), Group Discussion (2), SWOT Analysis (2),
Presentation Skills (1), Picture Perception (1), Brain Storming (1)

TOTAL: 30 HOURS

8. Text books:

- 1.R.S. Aggarwal, Quantitative Aptitude, S. Chand Publication.
- 2.R.S. Aggarwal, Logical Reasoning, S. Chand Publication.

9. Reference Books:

- 1.R.S. Aggarwal, A Modern Approach to Verbal & Non-Verbal Reasoning, S. Chand Publication.
2. Peeyush Bhardwaj, Analytical & Logical Reasoning, Arihant Publications.

Semester III Course Details

[illegible]

SEMESTER III

COURSE CODE	COURSE NAME	L	T	P	C
2431MG1600	INTERNATIONAL BUSINESS MANAGEMENT	3	0	0	3

1. Preamble

This Course is to familiarize students with the global strategies and its management for successful operations of the international firms. This course will discuss and describe will the theoretical foundations of international trade and enabling students to learn the concepts, foreign trade, export & import financing and conflicts in international business management.

2. Prerequisite

To know the concepts the student needs to have the knowledge in subjects like Economics, Marketing Management and Business Ethics which serves as an essential prelude to the International Business Subject.

3. Links to Other Courses

Fundamental to all MBA courses.

4. Course Educational Objectives

Through this course the students will be able to: -

1. This course offers students the opportunity to learn and gain insight into how business is conducted in the international sector.
2. The syllabus is structured to equip students with managerial skills needed to navigate the challenges of the global workplace.
3. This course will help students understand international business strategies and export & import financing.
4. Students will gain comprehensive knowledge of various fields of international business.
5. Students will learn about risks and conflicts of international business.

5. Course Outcomes

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

Cos	Course Outcomes	Level of Learning domain (Based on Revised Bloom's)
C01	Explain the dimensions of international business and benefits of international business.	K2
C02	Apply the theories of international trade theories and its global strategy.	K3
C03	Examine the export and import financing of international business.	K4
C04	Analyze the various functional areas of international business.	K4
C05	Determine the risks and conflicts in international business.	K5

6. Correlation of CO's with PO's

CO Nos.	P01	P02	P03	P04	P05	P06	P07
C01	M	M	H	H			
C02	M						H
C03		M	H	L	M		
C04					M	M	
C05			M			M	H

H-High; M-Medium; L-Low

7. Course Contents

UNIT I: Introduction to International Business

L-9

Basic Concepts and dimensions of International Business, Foreign market entry modes, Large, Medium, and Multinational Enterprises, Trade Theories: Foreign trade, Productivity Possibility Curve, Principles of Absolute Advantage, Relative Advantage, Exchange Ratios and Trade, Value Chain Framework, Benefits of International Business.

UNIT II: International Trade Theories and Global Strategy

L-9

Theories of International Business and International Economic Institutions: Basic trade theories - absolute advantage theory - comparative cost theory – Hecksher theory – Ohlin theory - Factor Endowment Theory - Euro currency market, Multilateral economic institutions- IMF, World Bank, WTO, UNCTAD.

UNIT III: Export and Import Financing

L-9

Export and Import Financing, Lack of Trust, Export Documentation, Letter of Credit, Draft, Bill of Lading, A Typical International Trade Transaction; Trade Policy–Institutional support to promote exports. Foreign Direct Investment (FDI) –Theory and movements, SEZ policies - International Monetary Fund - India's foreign exchange scenario - Foreign exchange markets in India - current EXIM policy – DGFT, EXIM procedures and Acts.

UNIT IV: Production, Marketing, Financial and Human Resource Management of International Business

L-9

Global production –Location –scale of operations- cost of production – Make or Buy decisions – global supply chain issues – Quality considerations- Globalization of markets, marketing strategy – Challenges in product development, pricing, production and channel management- Investment decisions – economic- Political risk – sources of fund- exchange –rate risk and management – strategic orientation – selection of expatriate managers- Training and development – compensation.

UNIT V: Risks and Conflicts in International Business

L-9

Risk in international business, importance, types of international risk, variables affecting international risk, international marketing risks, country risk assessment, checklist for international business risk - Conflict in international business- Sources and types of conflict – Conflict resolutions.

TOTAL: 45 HOURS

8. Text Book

1. Francis Cherunilam, "International Business – Text and Cases", PHI Learning Private Limited, 6th Edition, 2020.
2. John Daniels, (2024), Lee Radebaugh, Daniel Sullivan and Prashant Selvan, "International Business", Pearson India Education Services Private Limited, 16th Edition,

9. Reference Books

1. Vyuptakesh Sharan, "International Business – Concepts, Environment and Strategy", Pearson Education in South India, 3rd Edition, 2023.
2. Charles W. L. Hill, "International Business – Competing in the Global Marketplace", McGraw Hill, 13th Edition, 2023.
3. Aswathappa K., "International Business", McGraw Hill Education (India) Private Limited, 7th Edition, 2020.

PROGRAMME ELECTIVE
SEMESTER III
DIGITAL MARKETING

DIGITAL MARKETING

Sl. No.	Course Code	Course Name	L	T	P	C
1	2432MG1600	Introduction to Digital Marketing	3	0	0	3
2	2432MG1601	E-Commerce and Digital Markets	3	0	0	3
3	2432MG1602	Social Media Marketing	3	0	0	3
4	2432MG1603	Content Marketing and Communication	3	0	0	3
5	2432MG1604	Affiliate Marketing	3	0	0	3
6	2432MG1605	Search Engine Marketing and SEO	3	0	0	3

Course Code	Course Name	L	T	P	C
2432MG1600	INTRODUCTION TO DIGITAL MARKETING	3	0	0	3

1. Preamble

The formulation of this course is to familiarize oneself with concepts such as email marketing, Digital display and social media such as Facebook, Twitter and LinkedIn.

2. Prerequisite

For an optimum grasp of this course, candidates can have a basic knowledge of E-commerce.

3. Links To Other Courses

All Diplomas, postgraduate diplomas, master's degree courses related to Digital Marketing, and E-commerce.

4. Course Educational Objectives

- To understand the basic Concepts of Digital marketing and the road map for successful Digital marketing strategies.
- The primary objective of this subject is to examine and explore the role and importance of digital marketing in today's rapidly changing business environment.
- It also focuses on how organizations can utilize digital marketing and measure their effectiveness.

5. Course Outcomes

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

CO Nos.	Course Outcomes	Level of Learning domain (Based on Revised Bloom's)
CO1	Explain the role and importance of digital marketing in today's rapidly changing business environment.	K2
CO2	Outline how SEO is used in digital marketing and how it can be utilized by organizations.	K2
CO3	Identify the key elements of a digital marketing strategy	K3
CO4	Evaluate the effectiveness of digital marketing.	K5
CO5	Explain the skills in common digital marketing tools such as SEO, SEM, Social media and Blogs.	K2

6. Correlation of CO's with PO's

CO Nos.	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	H		M	H	H		
CO2	H	M		H			H
CO3			M		H	M	H
CO4				H	H		
CO5	H	M				M	H

H- High; M-Medium; L-Low

7. Course Contents

UNIT I: Fundamentals of Digital Marketing

L-9

Fundamentals of Digital Marketing & Its Significance, Traditional Marketing vs Digital Marketing, Evolution of Digital Marketing, Digital Marketing Landscape, Key Drivers, Digital Consumer & Communities, Digital Advertising Market in India, Skills in Digital Marketing, Digital Marketing Strategy- Components -Opportunities for building a Brand - Prompt Engineering..

UNIT II: Search Engine Optimization

L-9

Terminology used in Digital Marketing, PPC and online marketing through social media, Social Media Marketing, Search Engine Optimization - Keyword Strategy- SEO Strategy - SEO success factors -On-Page Techniques - Off-Page Techniques. Search Engine Marketing- How Search Engine works- SEM components- PPC advertising -Display Advertisement.

UNIT III: E- Email Marketing & Mobile Apps

L-9

E- Mail Marketing - Types of E- Mail Marketing - Email Automation - Lead Generation - Integrating Email with Social Media and Mobile- Measuring and maximizing email campaign effectiveness. Mobile Marketing- Mobile Inventory/channels- Location-based; Context-based; Coupons and offers, Mobile Apps, Mobile Commerce, SMS Campaigns- Profiling and targeting.

UNIT IV: Social Media Marketing

L-9

Social Media Marketing - Social Media Channels- Leveraging Social media for brand conversations and buzz. Successful /benchmark Social media campaigns. Engagement Marketing- Building Customer relationships - Creating Loyalty drivers – Influencer Marketing.

UNIT V: Display advertising & recent trends

L-9

Display advertising, Buying Models, different types of ad tools, Display advertising terminology, types of display ads, different ad formats, Ad placement techniques, important terminology, Programmatic Digital Advertising. Digital Transformation & Channel Attribution- Analytics, Recent trends in Digital marketing

TOTAL: 45 HOURS

8. Text Books

1. Ahuja, V. (2015). Digital marketing. Oxford University Press. ISBN: 9780199455447.
2. Gupta, S. (2022). Digital marketing (3rd ed.). McGraw-Hill Education (India) Private Limited. ISBN: 9789355320407.

9. Reference Books

1. Bhatia, P. S. (2019). Fundamentals of digital marketing (2nd ed.). Pearson Education India. ISBN: 9789352861606.
2. Ryan, D. (2020). Understanding digital marketing: A complete guide to engaging customers and implementing successful digital campaigns (5th ed.). Kogan Page. ISBN: 9781789666014.
3. Pulizzi, J. (2013). Epic content marketing: How to tell a different story, break through the clutter, and win more customers by marketing less. McGraw-Hill Education. ISBN: 9780071819893.

Course Code	Course Name	L	T	P	C
2432MG1601	E-COMMERCE AND DIGITAL MARKETS	3	0	0	3

1. Preamble

The formulation of this course is to familiarize oneself with concepts such as E-Commerce, E-business, and Digital Marketing.

2. Prerequisite

For an optimum grasp of this course, candidates can have a basic knowledge of Information Technology.

3. Links To Other Courses

All Diplomas, postgraduate diplomas, master's degree courses related to Digital Marketing, and E-commerce.

4. Course Educational Objectives

1. To learn about the foundations of E-Commerce.
2. Will be able to make E-Business plan and address E-Commerce - related issues.
3. To gain insights on Business incubators.

5. Course Outcomes

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

CO Nos.	Course Outcomes	Level of Learning domain (Based on Revised Bloom's)
C01	Explain the basics of E-commerce and know the difference between E-commerce and E-business, along with their types, features, and business models.	K2
C02	Interpret the technical infrastructure required for E-commerce, including the internet, websites, mobile apps, software, and hardware.	K2
C03	Analyze E-commerce security issues and understand various payment systems, security threats, and legal aspects involved.	K4
C04	Apply digital marketing strategies to reach customers online, increase website traffic, and use content marketing tools effectively.	K3
C05	Identify ethical, social, and legal concerns in E-commerce, like consumer privacy, intellectual property rights, and public safety.	K2

6. Correlation of CO's with PO's

CO Nos.	PO1	PO2	PO3	PO4	PO5	PO6	PO7
C01	H		H		M	H	
C02	H	M				H	M
C03	H		H	M			
C04		M			M	H	
C05			H	M			M

H- High; M-Medium; L-Low

7. Course Contents

Unit I: Introduction to E-Commerce

L-9

E-commerce - Difference between E-commerce and E-business- Technological Building Blocks - Trends in E-commerce - Features of E-commerce Technology- Types of E-Commerce- Assessing E- Commerce -Academic Disciplines Concerned with E-commerce - Careers in E-commerce - E-Commerce Business Models - How E-commerce Changes Business E-commerce onboarding process.

Unit II: Technology Infrastructure for E-commerce

L-9

Internet and its Infrastructure - Web - Features and Services - Mobile Apps - Imagine Your Ecommerce Presence - Building an E-commerce Presence: A Systematic Approach – Choosing Software - Choosing Hardware - Other E-commerce Site Tools - Developing a Mobile Website and Building Mobile Applications.

Unit III: E-Commerce Security and Payment Systems

L-9

The E-commerce Security Environment - Security Threats in the E-commerce Environment- Technology Solutions - Management Policies, Business Procedures, and Public Laws – Ecommerce Payment Systems - Electronic Billing Presentment and Payment - Payment Gateway.

UNIT IV: E-Commerce Customer Acquisition and Conversion Strategies

L-9

Understanding the digital customer journey in E-commerce platforms, customer acquisition funnel, customer engagement and retention strategies, landing page optimization, conversion rate optimization (CRO), marketplace marketing through Amazon, Flipkart and other online platforms, product listing optimization, customer reviews and trust-building mechanisms, cart abandonment and retargeting strategies, paid traffic and performance marketing, integrating payment gateways and checkout optimization, basics of E-commerce analytics and measuring online campaign performance.

Unit V: Ethical, Social and Political Issues in E-commerce

L-9

Ethical, Social and Political Issues in E-commerce - Privacy and Information Rights- Key Issues in Online Privacy of Consumers- Consumer Privacy Regulations and Enforcement - Intellectual Property Rights- Governance- Public Safety and Welfare

TOTAL: 45 HOURS

8. Text Books

1. Ahuja V (2015). Digital Marketing. Oxford University Press.
2. S.J.P.T. Joseph (2019), "E-Commerce: An Indian Perspective", 6th Edition, PHI Publication.

9. Reference Books

1. Kenneth C. Laudon, Carol Guercio Traver (2019), "E-Commerce", 15th Edition, Pearson Publication.
2. Ryan Deiss, Russ Henneberry (2017), "Digital Marketing for Dummies", 1st Edition, John Wiley & Sons, Inc.
3. Shivani Arora (2017), "E-Commerce", 1st Edition, Taxmann Publication.

Course Code	Course Name	L	T	P	C
2432MG1602	SOCIAL MEDIA MARKETING	3	0	0	3

1. Preamble

This course aims to understand and plan content for online marketing and to learn how to use social media to meet an organization's acquisition and brand objectives; Learn to incorporate best social media practices into the marketing campaign.

2. Prerequisite

For an optimum grasp of this course, candidates can have a basic knowledge of Digital Marketing, E-Commerce.

3. Links To Other Courses

All Diplomas, postgraduate diplomas, master's degree courses related to Digital Marketing, and E - Commerce.

4. Course Educational Objectives

1. To provide students with a comprehensive understanding of social media marketing principles, strategies, and best practices.
2. To familiarize students with the various social media platforms and their respective features, audiences, and advertising capabilities.
3. To cultivate students' ability to analyze social media metrics and use data-driven insights to refine marketing strategies and enhance campaign performance.

5. Course Outcomes

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

CO Nos.	Course Outcomes	Level of Learning domain (Based on Revised Bloom's)
C01	Demonstrate understanding of social media marketing concepts, including audience targeting, content creation, engagement strategies, and campaign measurement.	K2
C02	Identify the strengths and weaknesses of different social media platforms.	K3
C03	Develop proficiency in using social media management tools and advertising platforms.	K3
C04	Analyze social media metrics to assess the performance of marketing campaigns.	K4
C05	Explain how effectively they communicate their ideas, insights, and recommendations through written reports, oral presentations, and collaborative group discussions.	K2

6. Correlation of CO's with PO's

CO Nos.	P01	P02	P03	P04	P05	P06	P07
C01	M		M	H	H	M	H
C02					H		
C03	M	M				M	
C04		M		H			H
C05			M	H	H		H

H- High; M-Medium; L-Low

4. Course Contents

UNIT I: Introduction

L-9

Introduction to Social Media Marketing: Definition and Purpose of Social Media Marketing (SMM), Importance of SMM in the digital landscape, Overview of different social media platforms and their significance. Types of social media websites, mobile apps, email, social media- various social media websites; Blogging types, platforms.

UNIT II: Social Media Strategies

L-9

Social Media Management- Social Media and Target Audience- Sharing content on Social Media - Bookmarking websites; DO's and Don'ts of Social Media. Social Media Strategy- Goals, Planning, Strategies, Monitoring, Analysis; Tips of Social Media Marketing- Customisation; Social Media Optimization; Social Media Promotion - paid advertising, other Methods- Social Media ROI.

UNIT III: Social Media for Marketing

L-9

Social Media for Marketing -Facebook, LinkedIn, Twitter, YouTube. Establishing a Relationship with customers through Social Media. Introduction to Social Commerce - Social Analytics- Automation and Social Media- Social Media and other types of Marketing, Managing Tools of Social Media.

UNIT IV: Social Media Marketing Plan

L-9

SMM Plan- Setting Goals, Determining Strategies, Identifying Target Market, Selecting Tools, Selecting Platforms, Implementation. Blogging, Streaming Video and Podcasting: Criteria and Approach -70/20/10 with risk variants, 50-50 content, Brand Mnemonic, Brand story. Contextualising content creation - Using AI as Social Media Marketing Assistant.

UNIT V: Recent Trends in Social Media Marketing

L-9

Social media marketing and website, Becoming an authentic and engaged advertiser, Employees and social media marketing, Social media governance and tools, Real-time marketing, Recent Trends in Social Media, Social Media Ethics

TOTAL: 45 HOURS

8. Text Books

1. Ahuja, V. (2015). Digital marketing. Oxford University Press. ISBN: 9780199455447.
2. Gupta, S. (2022). Digital marketing (3rd ed.). McGraw-Hill Education (India) Private Limited. ISBN: 9789355320407.

9. Reference Books

1. Bhatia, P. S. (2019). Fundamentals of digital marketing (2nd ed.). Pearson Education India. ISBN: 9789352861606.
2. Ryan, D. (2020). Understanding digital marketing: A complete guide to engaging customers and implementing successful digital campaigns (5th ed.). Kogan Page. ISBN: 9781789666014.
3. Barker, M. S., Barker, D. I., Bormann, N. F., & Neher, K. E. (2017). Social media marketing: A strategic approach (2nd ed.). Cengage Learning. ISBN: 9781305502758.

Course Code	Course Title	L	T	P	C
2432MG1603	CONTENT MARKETING AND COMMUNICATIONS	3	0	0	3

1. Preamble

This course helps to attract, engage, and retain an audience by creating and sharing relevant articles, videos, podcasts, and other media. This approach establishes expertise, promotes brand awareness, and keeps your business top of mind when it's time to buy what you sell.

2. Prerequisite

Fundamentals and application of Content Marketing.

3. Links To Other Courses

Digital Marketing, Content Marketing, User. Generated Marketing etc

4. Course Objectives

1. Understand the foundations and evolution of digital marketing in a global and Indian context.
2. Develop effective content marketing strategies using both traditional and AI-assisted methods.
3. Gain hands-on experience in creating and managing paid and organic social media campaigns.

5. Course Outcomes

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

CO Nos.	Course Outcomes	Level of Learning domain (Based on Revised Bloom's)
C01	Compare traditional and digital marketing strategies and articulate the value of digital content.	K2
C02	Build AI-assisted, persuasive, SEO-friendly content aligned with brand goals.	K3
C03	Plan and execute effective social media ad campaigns with defined lead- generation goals.	K3
C04	Examine, optimize, and manage websites using current tools such as WordPress, Elementor, and Google Suite.	K4
C05	Evaluate the effectiveness of digital marketing campaigns using key performance indicators, and apply insights from tools like Google Analytics and Meta Ads Manager to refine content and strategy.	K5

6. Correlation of CO's with PO's

CO Nos.	PO1	PO2	PO3	PO4	PO5	PO6	PO7
C01	M		M	H	H	H	H
C02					H		H
C03	M	M				H	
C04		M		H			
C05			M	H	H		H

H- High; M-Medium; L-Low

7. Course Content

UNIT I: Fundamentals of Digital Marketing and Customer Journey

L-9

Introduction to online digital marketing – Importance of digital marketing – Traditional Vs. Digital Marketing – Significance of online marketing in the real world – Increasing visibility – Visitors' engagement – Bringing targeted traffic – Marketing funnel – Buying persona – Introduction to MarTech stack – Overview of customer journey mapping.

UNIT II: Strategic Content Marketing and Brand Engagement

L-9

Content marketing and its role in brand building – Building a successful content strategy – Paid versus free content – Creating persuasive and compelling content – Elements of effective content promotion – Successful content marketing in current scenarios – Analyzing efforts of content marketing in digital marketing – Prompt to AI- AI-driven content creation using tools like Chat GPT, Jasper, Writesonic – Content calendar planning – Repurposing content for multiple platforms.

UNIT III: Social Media Campaigns and Paid Promotion

L-9

Introduction to social media marketing – Difference between organic reach and paid advertisements – Instagram marketing – Asset creation using Canva and Adobe Express – Basics of Facebook Ads – Creating Paid Ads using Meta Ads Manager – Advanced Facebook & Instagram Ads – Lead generation strategy on Facebook & Instagram ads – Ads budget allocation – Running ads on LinkedIn and YouTube Shorts – Social media analytics dashboards.

UNIT IV: Website Creation and Online Advertising Tools

L-9

Basics of Google Ads – Google Search Ads – Google Display Ads – YouTube Ads – Introduction to Google Analytics – Google Webmaster Tools – Google Tag Manager – Google Business/Review – Google Performance Max Campaigns – Create Websites with WordPress – Blog creation – Add keywords in websites – E-commerce websites – Website design using Elementor / Divi – Best website checklist – Introduction to landing page design and optimization.

UNIT V: Content Performance Measurement and Digital Campaign Analytics

L-9

Understanding content KPIs – Measuring content success: reach, impressions, CTR, engagement rate, conversion rate – Interpreting Google Analytics: traffic sources, bounce rate, user journey – Introduction to campaign tracking using UTM parameters – Setting SMART goals for digital campaigns – A/B Testing of content and ads – Dashboard creation using Google Looker Studio (formerly Data Studio) – Interpreting performance reports from Meta Ads Manager and Google Ads – Integrating analytics insights into content strategy improvement – Budget reallocation based on performance data – Introduction to marketing automation tools for content distribution and lead nurturing

Total: 45 HOURS

8. Text Books

1. Joe Pulizzi, "How Entrepreneurs Use Content to Build Massive Audiences and Create Radically Successful Businesses", McGraw-Hill LLC, 2015.
2. Gupta, S. (2022). Digital marketing (3rd ed.). McGraw-Hill Education (India) Private Limited. ISBN: 9789355320407.

9. Reference Books

1. Mathur, V., & Arora, S. (2020). Digital marketing. PHI Learning Pvt. Ltd. ISBN: 9788194800279. PHI Learning
2. Sharma, K., & Aggarwal, R. (2023). Digital marketing: A practical approach. Taxmann Publications Pvt. Ltd. ISBN: 9789356223462.
3. Tiwari, M. K. (2021). Digital marketing and e-commerce. Oxford University Press. ISBN: 9780199455447. Oxford University Press India.
4. Desai, P. (2023). Fundamentals of digital marketing. Himalaya Publishing House. ISBN: 9789357059619.

Course Code	Course Title	L	T	P	C
2432MG1604	AFFILIATE MARKETING	3	0	0	3

1. Preamble

This course explores affiliate marketing campaigns, digital marketing essentials, content strategies, website development, analytics, and performance optimization techniques.

2. Prerequisite

Basic Affiliate marketing knowledge, familiarity with internet tools, and interest in learning digital marketing strategies

3. Links To Other Courses

E-Commerce, Social Media Marketing

4. Course Objectives

By the end of this course, students will:

1. Understand the core concepts and structure of affiliate marketing and its relevance to digital business models.
2. Gain hands-on knowledge of joining, managing, and promoting affiliate programs.
3. Explore various types of affiliates and their distinct marketing strategies.

5. Course Outcomes

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

CO Nos.	Course Outcomes	Level of Learning domain (Based on Revised Bloom's)
C01	Explain the principles, benefits, and mechanisms of affiliate marketing.	K2
C02	Evaluate and enrol in suitable affiliate programs and track their performance using standard tools.	K5
C03	Identify different affiliate marketing models and apply suitable strategies for each.	K3
C04	Analyze and improve affiliate campaigns using SEO and market research techniques.	K4
C05	Plan, set up and manage an affiliate marketing program effectively, ensuring quality control and fraud prevention.	K3

6. Correlation of CO's with PO's

CO Nos.	P01	P02	P03	P04	P05	P06	P07
C01	H		H	H			
C02	H	M		H		M	M
C03	H					M	
C04			H		M		
C05		M	H	H	M		M

H- High; M-Medium; L-Low

7. Course Content

Unit I: Foundations of Affiliate Marketing

L-9

Introduction to affiliate marketing, how affiliate marketing works-affiliate program payment methods- cookies, cookie stuffing and affiliates, AdSense, email spam, adware, trademark bidding-tiered affiliate marketing, cross selling and up selling-multi tier marketing and commissions.

Unit II: Setting Up and Managing Affiliate Accounts

L-9

Enrolling in an affiliate marketing program-signing up as an affiliate-logging into your affiliate account-integrating affiliate links into your websites-monitoring affiliate performance and tracking sales, and setting up an affiliate website. Promoting your affiliate program-performing market analysis and market research-market strategies establishment, affiliate marketing and organic search optimization.

Unit III: Models and Types of Affiliate Marketing

L-9

Types of Affiliate Marketing Search affiliates- Price comparison service website Loyalty websites-Cause related and coupon websites Content and niche market website Personal weblogs and website syndicates- Email marketing and shopping directories Registration or co-registration affiliates- File sharing affiliates.

Unit IV: Strategies and Optimization Techniques

L-9

Strategies to improve affiliate marketing - affiliate links and how to deal with them, promoting your affiliate program-overcoming the challenges of affiliate marketing, performing market analysis and market research-market strategies establishment-affiliate marketing and organic search optimization.

Unit V: Launching and Scaling Affiliate Programs

L-9

Setting Up Affiliate Marketing Program - How to attract affiliates- Hosting and implementing an affiliate program- Growing your Affiliate Numbers. Setting up an affiliate program- Affiliate network service agreement- Data feeds and customer returns. Merchants/publisher management- Affiliate program promotion and content pages, Screen Affiliates- Combating affiliate fraud

Total: 45 HOURS

8. Text Books

1. Ahuja, V. (2015). Digital marketing. Oxford University Press India. ISBN: 9780199455447. Oxford University Press
2. Gupta, S. (2022). Digital marketing (3rd ed.). McGraw-Hill Education (India) Private Limited. ISBN: 9789355320407

9. Reference Books

1. Bhatia, P. S. (2023). Fundamentals of digital marketing (3rd ed.). Pearson Education India. ISBN: 9789357059619.
2. Gupta, S. (2022). Digital marketing (3rd ed.). McGraw Hill Education (India) Private Limited. ISBN: 9789355320407.
3. Ryan, D. (2020). Understanding digital marketing: Marketing strategies for engaging the digital generation (5th ed.). Kogan Page Limited. ISBN: 9781789666014.

Course Code	Course Title	L	T	P	C
2432MG1605	SEARCH ENGINE MARKETING & SEO	3	0	0	3

1. Preamble

This course explores Search Engine Marketing, SEO, PPC, website optimization, and technical strategies for effective online presence and marketing.

2. Prerequisite

A basic understanding of digital marketing, web technologies, and internet platforms will enhance comprehension of SEO and SEM concepts.

3. Links To Other Courses

Social Media Marketing, Introduction to Digital Marketing

4. Course Objectives

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

1. Understand the core concepts of Search Engine Marketing (SEM) and Search Engine Optimization (SEO).
2. Plan and implement effective PPC campaigns using tools like Google Ads.
3. Develop bidding strategies to optimize campaign performance and budget utilization.

5. Course Outcomes

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

CO Nos.	Course Outcomes	Level of Learning domain (Based on Revised Bloom's)
C01	Explain the fundamentals and components of SEM and SEO.	K2
C02	Plan, set up and manage goal-oriented PPC campaigns.	K3
C03	Apply bid management strategies to improve ad performance and ROI	K3
C04	Analyze website content and structure in alignment with search engine algorithms	K4
C05	Examine and fix technical SEO issues to enhance crawlability and rankings.	K4

6. Correlation of CO's with PO's

CO Nos.	P01	P02	P03	P04	P05	P06	P07
C01	H		H	M			
C02	H	M	H	M	M	M	
C03	H					M	
C04							M
C05		M	H		M		M

H- High; M-Medium; L-Low

7. Course Content

Unit I: INTRODUCTION

L-9

SEO AND SEM Understanding the Importance, Google search, Rule-based personalization of marketing at internet scale, Overview of Google Ads, Bing Ads, landing pages, elements, optimization.

Unit II: PPC Campaign Management

L-9

PPC Campaigns: PPC definition & its functioning, PPC Terminology – Quality Score, Conversion Rate, etc., Quality Score Overview, setting objectives, goals & expectations, Actionable metrics for performance measurements, Formulating account structure, Effective segmentation of keywords, Usage of Multiple match types and Non-overlapping Ad Groups.

Unit III: Web Creation with SEO

L-9

Concepts of search engine optimization (SEO): Relevance, Importance, Popularity, Trust, Authority keyword, WordPress and CMS-Search engines and directories, How search engines work, Crawlers, robots, spiders, Algorithms, Search engine indexing, Ranking, Directories, Website architecture, Static pages, Dynamic pages.

Unit IV: Technical SEO & Analytics

L-9

Search engine Friendliness and Specific Rankings: Page coding, managing spiders/robots, Crawlability, Rewriting pages, Subdomains, Alexa ranking, Image optimization, Search Engine Optimization analysis, crawler issues, removers, sitemap submission Google Search Console.

Unit V: On-Page SEO Techniques & Website Optimization Strategies

L-9

On-page SEO, importance, influence factors, Optimizing Web Page, Website Optimization, title, description and keyword tags, header tags, Anchor Text, Navigation Links, Contextual links, Canonical URLs, Page Nations, keyword research, meta tag optimization, SEO content optimization, sitemap creation and submission, robots.txt - Answer Engine Optimization (AEO) and Generative Engine Optimization (GEO)

TOTAL: 45 HOURS

8. Text Books

1. Ahuja, V. (2015). Digital marketing. Oxford University Press. ISBN: 9780199455447.
2. Gupta, S. (2022). Digital marketing (3rd ed.). McGraw-Hill Education (India) Private Limited. ISBN: 9789355320407.

9. Reference Booka

1. Bhatia, P. S. (2019). Fundamentals of digital marketing (2nd ed.). Pearson Education India. ISBN: 9789352861606.
2. Ryan, D. (2020). Understanding digital marketing: A complete guide to engaging customers and implementing successful digital campaigns (5th ed.). Kogan Page. ISBN: 9781789666014.
3. Barker, M. S., Barker, D. I., Bormann, N. F., & Neher, K. E. (2017). Social media marketing: A strategic approach (2nd ed.). Cengage Learning. ISBN: 9781305502758.

PROGRAMME ELECTIVE
SEMESTER III
FINANCE

Sl. No.	Course Code	Course Name	L	T	P	C
1	2432MG1606	Investment Analysis and Portfolio Management	3	0	0	3
2	2432MG1607	Advanced Corporate Finance	3	0	0	3
3	2432MG1608	Strategic Cost Accounting and Management Control	3	0	0	3
4	2432MG1609	Financial Risk Analytics	3	0	0	3
5	2432MG1610	IT Consulting in Banking and Financial Services	3	0	0	3
6	2432MG1611	International Finance	3	0	0	3

Course Code	Course Title	L	T	P	C
2432MG1606	INVESTMENT ANALYSIS AND PORTFOLIO MANAGEMENT	3	0	0	3

1. Preamble

This course aims to provide students understand the foundational components of modern finance, designed to help individuals and institutions make informed decisions regarding their investment strategies. In an environment of constantly changing market conditions, understanding these concepts is essential for achieving financial goals while managing risk effectively.

2. Prerequisite

Basic knowledge of financial management and Accounting for management.

3. Links to Other Courses

Financial Risk Analytics and Financial Management.

4. Course Educational Objectives

1. To familiarize the students with the functioning of Investment markets.
2. An in-depth insight into the Indian stock exchanges and how to protect the investors through credit rating.
3. Managing investment in primary market and secondary market, investment decision towards Derivative markets and developing optimal portfolio strategies.

5. Course Outcomes

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

Cos	Course Outcomes	Level of Learning domain (Based on Revised Bloom's)
C01	Explain the concept of time value of money in computing the value of fixed income securities.	K2
C02	Compare the value of a company's equity share with other company's equity by using various methods and tools of equity valuation.	K2
C03	Build and evaluate the relationship between the concept of risk and return and will be able to relate its implication on creating portfolio.	K3
C04	Examine the theoretical concepts of underlying the stock indices.	K4
C05	Analyze the tools and strategies for portfolio creation and evaluation	K4

6. Correlation of COs with Pos

CO Nos.	P01	P02	P03	P04	P05	P06	P07
C01	H	H			H		H
C02	H	H	M	H	H	H	
C03	H	H	M		H	H	H
C04		H		H		H	H
C05				H	H		H

H- High; M-Medium; L-Low

Unit I: Investment Planning**L-9**

Investment planning: Process and objectives of investment, Concept and measurement of return & risk for various assets class, Measurement of portfolio risk and return. Diversification & Portfolio formation. Gold Bond; Real estate; Investment in Greenfield and brownfield Projects; Investment in fixed income instruments financial derivatives & Commodity market in India. Mutual fund schemes including SIP: International investment avenues

Unit II: Investment Analysis**L-9**

Concepts of Investment Analysis , Fundamental Analysis and Technical Analysis, Dow Theory, tools of Investment Analysis, Tools of Technical Analysis, Global Bonds, Option Markets, and their role in international financial markets, Important Chart Formations or Price Patterns and Technical Indicators, Criticisms of Technical Analysis.

Unit III: Portfolio Selection**L-9**

Efficient market hypothesis, Random Walk Theory, The Efficient Market Hypothesis Capital Asset Pricing Model (CAPM), Arbitrage pricing theory, Beta computations in excel, Risk return and opportunity cost of capital, Market portfolio, Measuring portfolio risk, Anomalies in CAPM, Sources of market wide risk.

Unit IV: Stock Indices**L-9**

Price weighted index, equally weighted index: Bombay Stock Exchange, Standard & Poor's, Computation of Sensex and related computations, Event study method, Measures of portfolio performance, Mutual fund ratings, Contingent claim securities, Replicating portfolios, Interest rate derivatives – Speculation Market and its impact on financial markets SEBI Legal and Regulatory Framework – Anti-money laundering.

Unit V: Portfolio Revision**L-9**

Portfolio Revision: Meaning and Need of Portfolio Revision, Constraints in Portfolio Revision; Assets allocation: Strategies for Asset Allocation-Portfolio Evaluation – Evaluation of Portfolio Performance, Sharpe's Performance Index, Treynor's Performance Index and Jensen's Performance Index.

TOTAL: 45 HOURS**8. Text Books**

1. Punithavathy Pandian -- Security analysis and portfolio management-2nd edition, vikas publication
2. Bhalla V K, Investment management – Security analysis and portfolio management, S. Chand & Company Pvt Ltd, New Delhi, 2013, 19th Edition
3. Chandra Prasanna, Investment Analysis and Portfolio Management, Tata McGraw Hill, New Delhi 2017, 5th Edition

9. Reference Book

1. Donald Fischer, Ronald Jordan and Ashwini Pradhan, Security Analysis & Portfolio Management", Pearson Education, New Delhi, 2018, 7th Edition.

Course Code	Course Title	L	T	P	C
2432MG1607	ADVANCED CORPORATE FINANCE	3	0	0	3

1. Preamble

This course provides insights into strategic financial decisions, capital raising, governance, and valuation, with a focus on ESG and private equity. It equips students with analytical tools for advanced financial planning and corporate strategy.

2. Prerequisite

To have foundational knowledge of financial management and basic corporate finance principles

3. Links to Other Courses

Financial Management, Investment Analysis, and Strategic Management.

4. Course Educational Objectives

Through this course the students will be able: -

1. To acquire an in-depth understanding of various sources of finance, capital raising processes, and strategies in corporate financing.
2. To explore the principles of corporate governance, integration of ESG standards within corporate strategy.
3. To Learn how companies raise equity capital and the steps involved.
4. To Gain knowledge of how private equity investments are valued and assessed.
5. To study how companies grow through mergers, acquisitions, and partnerships.

5. Course Outcomes

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

C-O Nos.	Course Outcomes	Level of Learning domain (Based on Revised Bloom's)
CO1	Explain the concept of corporate financing.	K2
CO2	Evaluate the effectiveness of corporate governance practices and ESG compliance.	K5
CO3	Examine the impact of regulatory frameworks and risks in equity capital decisions.	K4
CO4	Apply valuation methods and risk assessment tools to evaluate a company's financial worth.	K3
CO5	Outline the regulatory frameworks that guide mergers and acquisitions to support business growth and diversification.	K2

6. Correlation of CO's with PO's

CO Nos.	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	H		M				H
CO2	H	H		H			H
CO3	H	H	M	H	H	M	H
CO4		H		H	H	M	H
CO5	H			H	H		

H- High; M-Medium; L-Low

7. Course Contents

Unit I: Corporate Financing

L-9

Corporate financing -Sources of Finance and market efficiency. - Capital Raising Process- Dividend and Payout Policies- Corporate Financing Strategy-Recent Trends in Corporate Financing

Unit II: Corporate Governance and ESG

L-9

Introduction to Corporate Governance, Principles and Framework of Corporate Governance- Board of Directors and Management-Corporate Governance in India- ESG Reporting and Standards- ESG and Corporate Strategy.

Unit III: Raising Equity Capital

L-9

Equity capital, Types of equity: Sources: Steps in raising equity capital, Regulatory and legal framework- Stochastic Models - Stochastic Models for risk and uncertainties in Capital budgeting.

Unit IV: Private Equity Valuation

L-9

Introduction to Private Equity (PE)- Difference between Public Equity and Private Equity, - types of private equity investments: Private Equity Investment Process- Valuation Methods in Private Equity- Discounted Cash Flow (DCF) Analysis- Performance Measurement in PE- Risk Assessment in Private Equity- Exit Strategies in Private Equity.

Unit V: Mergers and Amalgamation

L-9

Merger as a Strategy - Synergies, Growth, Diversification- SEBI Guidelines - Corporate Tax Planning - Amalgamation - Sickness - Revival - BIFR Provision- - Legal and Regulatory Framework (SEBI, RBI Guidelines, CCI (Competition Commission of India)- Mergers & Acquisitions Under the Competition Act, 2002

TOTAL: 45 HOURS

8. Text book

1. Pandey M., 'Corporate Finance'. Vikas Publishing House, New Delhi, India, 2021, 12-Edition
2. Khan, M. Y., & Jain, P. K. (2018). Financial management: Text, problems and cases (8th ed.). McGraw Hill Education
3. Reddy, G. S. (2019). *Financial management: Principles and practice* (4th ed.). Himalaya Publishing House

9. Reference books

1. Thomas Copeland, Fred Weston, Joseph Katz and Kuldeep Shastri. Financial Theory and Corporate Policy, 4th Edition, Pearson India, Chennai, (2007).
2. Aswath Damodaran, Corporate Finance: Theory and Practice, John Wiley and Sons, 4th Edition (2020).
3. Richard Brealy, Stewart Myers, Franklin Allen and Pitabas Mohanty, Principles of corporate finance, 12th edition, Tata Mcgraw Hill, New Delhi (2018).
4. Prasad G. Godbole, Mergers, Acquisitions and Corporate Restructuring, Vikas Publishing House, New Delhi, India, 2020, 14th edition.

Course Code	Course Title	L	T	P	C
2432MG1608	STRATEGIC COST ACCOUNTING AND MANAGEMENT CONTROL	3	0	0	3

1. Preamble

This course provides a comprehensive understanding of strategic cost management tools and techniques for effective business decision-making. It focuses on cost control, activity-based costing, and sector-specific applications in agriculture and IT.

2. Prerequisite

Basic knowledge of cost accounting and financial management.

3. Links To Other Course

Cost Accounting, Financial Management, Strategic Management, Managerial Economics.

4. Course Educational Objectives

Through this course the students will be able to: -

1. Understand the concepts and techniques of strategic cost management (SCM).
2. To Learn how to control and reduce costs through different management techniques.
3. To Apply activity-based costing for better budgeting and decision-making.
4. To Use costing information for effective pricing and business decisions.
5. Analyze cost management practices in specific sectors like agriculture and IT.

5. Course Outcomes

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

CO Nos.	Course Outcomes	Level of Learning domain (Based on Revised Bloom's)
C01	Explain the fundamentals of strategies Cost Accounting & traditional cost management Concept.	K2
C02	Apply cost sheet, cost control and reduction techniques to manage costs in a business	K3
C03	Identify the cost allocation methods to enhance decision-making in the company.	K3
C04	Analysis different costing approaches and their effects on business decisions.	K4
C05	Evaluate the effectiveness of cost management strategies in different sectors.	K5

6. Correlation of CO's with PO's

CO Nos.	P01	P02	P03	P04	P05	P06	P07
C01	H				H		
C02	H	H		H	H		H
C03	H	H	L	H	H	M	H
C04	H	H		H	H	M	H
C05				H	H		H

H- High; M-Medium; L-Low

7. Course Contents

Unit I: Introduction to Strategic Cost Management

L-9

Introduction to Strategic Cost Management (SCM) – Need for SCM – Differences between SCM and Traditional Cost Management - Value Chain Analysis: Meaning and steps - Quality Cost Management: Quality Management – Cost of Quality –Indian Cost Accounting Standard 21 on Quality Control - Introduction to Lean System – Benefits of Lean System.

Unit II: Cost Control & Cost Reduction

L-9

Elements of Cost - Direct and Indirect costs - Cost sheets - Purpose of cost sheet -Specimen of Cost Sheet -Cost Control and Reduction Cost Management Techniques: Cost Control: Meaning and Prerequisites - Cost Reduction: Meaning and Scope – Differences between Cost control and cost reduction - Standard Costing.

Unit III: Activity Based Costing

L-9

Activity Based Cost Management Concept, Purpose, Stages, Benefits, Relevance in Decision making and its Application in Budgeting – Practical problems.

Unit IV: Costing for Decision Making

L-9

Costing information for decision making - Pricing decisions and cost management - Raw Material Procurement in Decision Making -Concepts used in costing - Target Costing - Balanced score cards - application in business environments and their usefulness in decision making.

Unit V: Cost Management in Agriculture and IT Sector

L-9

Agriculture Sector: Features, Cost Structure, Cost Management, Tools to measure the performance, Minimum Support Price and International Perspective –Information Technology Sector: Features, Cost Structure, Cost Management and International Perspective

TOTAL: 45 HOURS

8. Text books

1. Shank, J. K., & Govindarajan, V. (1993). Strategic cost management: The new tool for competitive advantage. Free Press
2. Jain, S. P., & Narang, K. L. (2021). Advanced cost accounting and cost systems. Kalyani Publishers

9. Reference books

1. Kishore, R. M. (2021). Cost and management accounting. New Delhi, India: Taxmann Publications.
2. Horngren, C. T., Datar, S. M., & Rajan, M. V. (2017). Cost accounting: A managerial emphasis (15th ed.). Boston, MA: Pearson Education
3. Arora, M. N. (2022). Cost accounting: Principles and practice (13th ed.). Vikas Publishing House.
4. Horngren, C. T., Datar, S. M., & Rajan, M. V. (2012), Cost accounting: A managerial emphasis (14th Global ed.). Pearson Education Limited.

Course Code	Course Title	L	T	P	C
2432MG1609	FINANCIAL RISK ANALYTICS	3	0	0	3

1. Preamble

This course focuses on the fundamental concepts, tools, and techniques in financial risk analytics, including the identification, measurement, and management of various types of financial risks. It also examines the regulatory frameworks, industry applications, and real-world case studies to equip students with the skills needed to manage financial risks effectively.

2. Prerequisite

A basic understanding of finance and risk management concepts.

3. Links To Other Course

Corporate Finance, Risk and Insurance Management, Derivatives.

4. Course Educational Objectives

Through this course the students will be able to: -

1. To gain knowledge about various types of financial risks and their measurement.
2. To understand how businesses manage financial risks using tools and strategies.
3. To learn about financial instruments used for risk control and mitigation.
4. To understand the role of regulations and reporting in effective risk management.

5. Course Outcomes

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

CO Nos.	Course Outcomes	Level of Learning domain (Based on Revised Bloom's)
CO1	Explain the financial risks analytics & regulatory framework in decisions making	K2
CO2	Analyse the impact of risk measurement on financial decision-making.	K4
CO3	Apply the risk management strategies to mitigate financial uncertainties.	K3
CO4	Identify the risk in various instrument	K3
CO5	Assess the effectiveness of regulatory frameworks in managing financial risks.	K5

6. Correlation of CO's with PO's

CO Nos.	P01	P02	P03	P04	P05	P06	P07
CO1	H			M			H
CO2	H	H	M		H	M	H
CO3	H	H	M		H		H
CO4		H			H	M	
CO5				M			H

H- High; M-Medium; L-Low

7. Course content

Unit I: Introduction to Financial Risk Analytics

L-9

Financial risk: Meaning, Types of Financial Risks- Tools and Techniques in Financial Risk Analytics- Key Applications of Financial Risk Analytics- Emerging Trends in Financial Risk Analytics- Steps to Implement Financial Risk Analytics- Regulatory Framework (Basel Accords, SEBI, RBI Guidelines)- Real-World Financial Risk failure.

Unit II: Risk Management

L-9

Measurement of Risk - Credit Risk Measurement -types - Market Risk Measurement-Interest Rate Risk Measurement -Asset Liability Management and Measurement of Operational Risk

Unit III: Risk Management

L-9

Managing Credit Risk - Operational Risk - Market Risk-liquid risk, Hedging and Insurance. - Risk Management Frameworks- Tools and Techniques- Industry Applications-Modelling Volatility and Risk: Characteristics of volatility- Measuring and modelling risk -Application of Value at Risk (VaR)- IRDA - Insurance Risk Management

Unit IV: Risk in Instruments

L-9

Tools for Risk Management - Derivatives - Combinations of Derivative Instruments - Derivative Pricing: Issues regarding derivative markets. Brownian motion, Black -Sholes model- Modelling derivative prices Neutral and Volatile Strategies - Credit Derivatives - Credit Ratings and Swaps.

Unit V: Regulation and Other Issues

L-9

Customer Credit Risk Management -Other Issues in Risk Management - Regulatory Framework - Basel Committee - Legal Issues -Accounting Issues - Tax Issues - MIS and Reporting - Data Aggregation in MIS Integrated -Risk Management.

TOTAL: 45 HOURS

8. Text Books

1. Fabrice Douglas Rouah and Gregory Vainberg, Financial Risk Analytics: A Term Structure Model Approach for Banking, Insurance, and Investment Management, Wiley India Pvt. Ltd, (2019).
2. Ruey S. Tsay (2012), "An Introduction to Analysis of Financial Data with R", Wiley, ISBN: 978-0-470-89081-3

9. References Books

1. Vipul Prakashan, Rekha Shinde, and Sandhya Kulkarni, Vipul Prakashan, Financial Risk Management, (2022).
2. John C. Hull and Sankarshan Basu, Risk Management and Financial Institutions, Wiley India Pvt. Ltd. (2021).
3. Aswath Damodaran, Strategic Risk Taking: A Framework for Risk Management, Pearson Education India (2017).
4. Dun and Bradstreet, Financial Risk Management, TMH, (2006).
5. John C Hull , Risk management and Financial Institutions, Wiley, (2015).

Course Code	Course Title	L	T	P	C
2432MG1610	IT CONSULTING IN BANKING AND FINANCIAL SERVICES	3	0	0	3

1. Preamble

This course aims to study the evolving landscape of banking and financial services, Information Technology (IT) consulting has emerged as a critical enabler of innovation, efficiency, and competitive advantage.

2. Prerequisite

Information Technology for managers and computerized accounting in previous semesters.

3. Links to Other Courses

Investment Analysis and Portfolio Management and International finance

4. Course Educational Objectives (CEO)

1. To understand the structure, operations, and regulatory environment of banking and financial institutions.
2. To gain insight into key financial products and services, recent developments, and customer segments.
3. To understand investment process, post economic crisis, principles of core banking systems, IT solutions to meet compliance, risk management and audit requirements.

5. Course Outcomes

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

Cos	Course Outcomes	Level of Learning domain (Based on Revised Bloom's)
C01	Explain the core concepts of retail, corporate, and investment banking.	K2
C02	Demonstrate the role of IT systems in automating mortgage processing, including loan origination & credit assessment, un	K2
C03	Identify the application of IT in managing consumer loan products, customer onboarding, credit scoring etc.	K3
C04	Examine how IT platforms facilitate wholesale banking operations such as trade finance, treasury services, corporate lending, and cash management.	K4
C05	Classify the understanding of IT tools used in investment banking and asset management.	K4

6. Correlation of COs with POs

CO Nos.	P01	P02	P03	P04	P05	P06	P07
C01	H			H			
C02		H	H	H	H		H
C03	H	H	H	H	H		H
C04	H	H	H	H	H		H
C05					H	L	H

H- High; M-Medium; L-Low

7. Course Contents

Unit I: Banking Concepts and IT

L-9

Overview of financial instruments - Financial market - Financial statements - Introduction to banking - Retail banking - Banking regulations and its functions-Deposit products - Retail channels - Instruments - Retail payments - E banking - evolution and growth - Sales and marketing - A schematic of a retail Bank.

Unit II: IT in Mortgages, Consumer Lending and Wholesale Banking

L-9

Mortgages, other loans - Community Banks - Credit Unions and Building Societies- Farm Credit - Retail Lending Cycle - Introduction to Cards and payments - Overview of Credit card market - Major players - Recent developments - Introduction to Wholesale banking and Commercial Lending - Corporate lending process - Credit derivatives - Treasury services - Cash management - Trade finance - Payment network.

Unit III: IT in Investment Management and Banking

L-9

Introduction to Investment management - process - Different classes of Investment management firms - Introduction to Investment banks - Functions - Major investment banks - Divisions - Investment banking post economic crisis - Brokerage Underwriting - Functions - Floor of Exchange - Order types - Over the counter market - brokerage firm -Market indices.

Unit IV: IT in Clearing and Settlement

L-9

Custody - Securities market place - Trading and Settlement - Asset Servicing - Trading - Clearing – Settlement- Regulatory Framework and Compliance- Case Studies.

Unit V: IT in Risk Management and Corporate Services

L-9

Concept of risk - Types of risk - Risk Management - Benefits of Corporate Administration. - IT Infrastructure and Cloud in Risk & Corporate Services - Cybersecurity and Information Risk Management- **AI impact and integration, loss of data privacy, and hacking technology** Emerging Trends and Case Studies.

TOTAL: 45 HOURS

8. Text Books

1. L. Harris, Trading and Exchanges: Market Microstructure for Practitioners, Oxford University Press, (2012).
2. Turban, E., & Volonino, L. (2010). *Information technology for management: Transforming organizations in the digital economy* (7th ed.). Wiley.

9. Reference Books

1. Majumdar, G. (2012). *Banking technology*. Tata McGraw-Hill Education.
2. M. Hara, Market microstructure Theory, John Wiley, (2008).
3. J. Keyes, Handbook of Technology in Financial Services, CRC Press, (1999).
4. J. Keyes, Financial Services Information systems, Taylor and Francis, (2005).
5. Business Analysis Body of Knowledge, Ver. 2.0, International Institute of Business Analysis, (2012).

Course Code	Course Title	L	T	P	C
2432MG1611	INTERNATIONAL FINANCE	3	0	0	3

1. Preamble

This course aims to explore the monetary interactions between countries, the functioning of global financial markets, and the complexities of cross-border financial decision-making.

2. Prerequisite

Basic knowledge of Financial Management and Accounting for managers in previous semester.

3. Links to Other Courses

Investment Analysis and Portfolio Management and IT Consulting in Banking And Financial Services

4. Course Educational Objectives

1. To understand the structure, dynamics, and interdependence of global and Indian financial systems, and assess the influence of macroeconomic indicators.
2. To know the functioning of foreign exchange markets, including exchange rate mechanisms, market participants, currency instruments etc.
3. To identify and categorize different types of foreign exchange exposure—transaction, translation, and economic, apply risk management strategies and instruments and international financing options available to global firms

5. Course Outcomes

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

Cos	Course Outcomes	Level of Learning domain (Based on Revised Bloom's)
C01	Explain the structure and key components of the global and Indian financial systems.	K2
C02	Classify the functioning of the foreign exchange market.	K2
C03	Identify and distinguish between transaction, translation, and economic exposure on multinational corporations.	K3
C04	Apply appropriate financial instruments and hedging strategies.	K3
C05	Analyze various international financing options available to global firms.	K4

6. Correlation of CO's with PO's

CO Nos.	P01	P02	P03	P04	P05	P06	P07
C01	H			H			H
C02		H	H	H			
C03	H	H	H	H			H
C04	H	H	H	H	M	L	H
C05		H			M		H

H- High; M-Medium; L-Low

7. Course Contents

Unit I: Global and Indian Financial Environment

L-9

Introduction - Global Economy - Financial Globalization - Financial Goals - International monetary system-Current multinational financial challenges - Experiences from India - Openness of Indian Economy - Indicators.

Unit II: Foreign Exchange Market

L-9

Evolution of foreign exchange market and foreign exchange System - Brief introduction to currency systems - Balance of Payments - Market participants - A model of foreign exchange markets interest parity - Interest rates and exchange rates - Fixed vs Fluctuating Exchange Rates - Private World Money - Eurocurrencies

Unit III: Foreign Exchange Exposure

L-9

Kinds of Foreign Exchange exposures - Transaction exposure and its measurement operating exposure - Sources - Measurement and difficulties associated with the measurement - Impact - Translation Exposure - Transaction and Economic Exposure vs Translation exposure

Unit IV: Forex Risk Management

L-9

International Trade and Risk Associated with International Trade - Introduction to different types of trade risk - Credit risk, Carriage Risk, Currency Risk, Country risk - Measuring risk exposure - Devices - Payoffs to risk management.

Unit V: Financing The Global Firms

L-9

Sourcing Debt/Equity Globally - Cost of capital - Optimal financial structure - Exchange Control Regulations - **Letter of Credit, foreign loans, and types of overseas loans** -Export Credit Guarantee Corporation - Exim Bank - Foreign Exchange Dealers' Association of India - Recent Developments.

TOTAL: 45 HOURS

8. Text Books

1. Gupta Shashi K., Rangi Praneet International Finance 2nd Edition 2017, Kalyani Publishers
2. Jain, P. K., Peyrard, J., & Yadav, S. S. (2010). *International financial management* (5th ed.). Macmillan Publishers India Limited
3. Khan, M. Y., & Jain, P. K. (2018). *Financial management: Text, problems and cases* (8th ed.). McGraw Hill Education

9. Reference Books

1. Eiteman David, Stonehill Arthur and Moffett Michael, *Multinational Business Finance*, 15th edition, Pearson education, Chennai, (2021).
2. Levi, Maurice D. *International Finance*. 6th edition, Routledge, 2018.
3. Madura, Jeff. *International Financial Management*. 13th edition, Cengage Learning, 2018.
4. Shapiro Alan, Moles Peter and Kumar Jayanta Seal, *International Financial Management*, Wiley India, (2016).
5. RBS Apte, P.G. (2020). *International Financial Management* (8th Ed.). McGraw Hill Education.

PROGRAMME ELECTIVE

SEMESTER III

HUMAN RESOURCE

Sl. No.	Course Code	Course Name	L	T	P	C
1	2432MG1612	Change Management	3	0	0	3
2	2432MG1613	Cross Cultural Management	3	0	0	3
3	2432MG1614	HR Metrics and Analytics	3	0	0	3
4	2432MG1615	Industry Psychology	3	0	0	3
5	2432MG1616	Learning and Development	3	0	0	3
6	2432MG1617	Talent Management	3	0	0	3

COURSE CODE	COURSE NAME	L	T	P	C
2432MG1612	CHANGE MANAGEMENT	3	0	0	3

1. Preamble

This course on Change Management aims to provide students with the knowledge and tools necessary to understand and manage transformation within organizations. It covers the dynamics of change, the influence of internal and external environmental factors, political and cultural impacts, and strategic approaches for managing resistance to change. Learners are prepared to handle complex change scenarios in real-world organizational settings.

2. Prerequisite

Foundational understanding of Management Principles, Organizational Behaviour and Human Resource Management. Basic knowledge of Strategic Management and Project Management.

3. Links to Other Courses

The Change Management course is closely linked to several core areas of management are Human Resource Management, Organizational Behaviour, Performance Appraisal Management, Operations Management, etc.

4. Course Educational Objectives

Through this course the students will be able to: -

1. This course develops an in-depth knowledge of the types, causes, and dynamics of organizational change.
2. Students are evaluating the strategies to overcome resistance to change at individual and organizational levels.
3. Students will examine theoretical models and frameworks for diagnosing and managing change.

5. Course Outcomes

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

CO's	Course Outcomes	Level of Learning domain (Based on Revised Bloom's)
CO1	Explain the role of HR strategies, structure and its implications.	K2
CO2	Identify the models of Models of diagnosing organizational groups and jobs.	K3
CO3	Categorize the role of personnel manager in cultural change and change management.	K4
CO4	Examine the process factors in intervention strategies, alternative strategies and method of implementation.	K4
CO5	Analyze the behavioral implications of change.	K4

6. Correlation of CO's with PO's

CO Nos.	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	H	M	H		H		
CO2	M			H			H
CO3		H		L	M	M	
CO4					L	M	
CO5			M				M

H-High; M-Medium; L-Low

7. Course Contents

Unit I: Introduction to Managing Change

L-9

Strategy - Change and HR strategies - Implementation and impact of change - Need for Change Management - Role of HR strategies in implementing change - Structure and strategic change - HR implications of structural choice and change - Managing Resistance to Change - Causes of and rationales for change, environmental and internal organizational determinants of change. Planned and emergent change - Proactive and reactive emergent change and respond to these changes - Incremental and radical change and rates / levels of change as a function of organizational life cycle positions

Unit II: Theoretical Frameworks

L-9

Multi-source feedback for organizational change - kotter's change model - Models of diagnosing organizational groups and jobs - The organizational change web Resistance to change - Barriers to organizational change - Rethinking resistance to organizational change - Strategies to deal with resistance

Unit III: Culture and the Change Process

L-9

The role of personnel manager in cultural change - Political issues arising from change -External environmental factors affecting culture - Organisational Culture - Realigning culture - Procedure for realignment - Technology and change management - Contributions to organisational change - Emergence of alternative process

Unit IV: Evaluation and Promotion of Change

L-9

Technological and process factors in intervention strategies - Alternative strategies - Methods of implementation - Survivor management - Evaluating and promoting change - Approaches to evaluation - Evaluation to promotion - Analysis and feedback procedures - crises and change management - Contemporary challenges in change management.

Unit V: Behavioural Implications of Change

L-9

Changing Behaviours - Reward Management - Values - Structure - Processes - Employee Relations - Changing the focus - Change through employee involvement Intent and paradoxical consequences of change -The positive and negative functions of resistance - Intended and unintended behavioural reaction to downsizing and layering - Understanding and managing uncertainty and ambiguity in the change process - Evaluating the changes-AI Tools for Reward Management

TOTAL: 45 HOURS

8. Text Book

1. Dipak Kumar Bhattacharyya (2011), *"Organizational change and Development"*, Oxford University Press.

9. Reference Books

1. Nilakani, V. & Ramnarayan, S, *"Change management"*, Sage Publications.
2. Singh, K. (2005), *"Organizational change and development"*, Excel Books.

COURSE CODE	COURSE NAME	L	T	P	C
2432MG1613	CROSS CULTURAL MANAGEMENT	3	0	0	3

1. Preamble

Cross-Cultural Management equips students with a deep understanding of the cultural dimensions that influence international business. The course emphasizes the importance of standard operating procedures across diverse cultures, the role of national and organizational culture, and adaptation strategies.

2. Prerequisite

To know the concepts of Principles of Management, Organizational Behaviour, Human Resource Management and concepts of International Business concepts will further support students in grasping cultural frameworks and their application in real-world management scenarios.

3. Links to Other Courses

Fundamental to all MBA courses.

4. Course Educational Objectives

Through this course the students will be able to: -

1. Understand the differences between domestic and international HRM and their strategic implications in global business.
2. Identify and overcome barriers to intercultural communication and adapt communication strategies for global negotiations.
3. Understand stages of cultural adjustment and apply methods for successful integration and ongoing improvement.

4. Course Outcomes

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

Cos	Course Outcomes	Level of Learning domain (Based on Revised Bloom's)
C01	Explain the strategic view and cultural context of Human Resource Management.	K2
C02	Identify the theoretical aspects, elements and process of cross cultures.	K3
C03	Analyze the conflicts of cross culture, multinational performance management and performance appraisal of international employees	K4
C04	Classify the barriers of intercultural communication.	K4
C05	Interpret the successful implementation of culture change, ethics and social responsibility in international HRM	K5

6. Correlation of CO's with PO's

CO Nos.	PO1	PO2	PO3	PO4	PO5	PO6	PO7
C01	M	M	H	H			
C02	H					M	H
C03			L	H	L		
C04		M			M	M	
C05			H				H

H-High; M-Medium; L-Low

7. Course Contents

Unit I: Introduction

L-9

Defining International HRM - Differences between Domestic and International HRM - Strategic View of IHRM - Changing Context of IHRM - Cultural Context of IHRM-Culture for a Business Context - National culture vs. business culture - East and West Cross Culture Management (CCM) and globally competitive market economy - Horizons in CCM, CCM among business stakeholders [managers, employees, shareholders, suppliers, customers and others].

Unit II: Culture and Global Management

L-9

Theoretical aspects of Cross Culture Management - Elements & Processes of Cross Cultures - Communication Strategies MNCs. - Importance of SOP of parent organization - Values of the organization - Cultural implications for Team Building - Cultural Dimensions and Dilemmas - Culture and Styles of Management.

Unit III: Cross Culture

L-9

Working with International teams – Groups processes encounter – Conflicts and cultural differences – Developing Intercultural relationships - Negotiation & Decision Making - Process of Negotiation - Reconciling cultural dilemmas multi-cultural Experience - Multinational Performance Management - Diversity, Equity and Inclusion Performance Appraisal of International Employees - AI Tools for employee performance management.

Unit IV: Culture and Communications

L-9

Business communication across cultures – Barriers to intercultural communication – Time Zone - Negotiating Internationally - Cultural Change in Organizations - Developing the values and behaviours necessary to build high-performance organization personnel.

Unit V: Designing the Strategy for a Culture

L-9

IHRM Trends and Future Challenges - Ethics and Social Responsibility in International HRM -360-Degree Cultural Awareness Training - Adoption with New Culture – Stages of Cultural Adoption and Stages of Culture Shock - Successful Implementation of Culture Change Phase - Measurement of Ongoing Improvement - Cultural barriers and strategies to overcome.

TOTAL: 45 HOURS

8. Text Book

1. Browaeys, M.-J., & Price, R. (2015). *Understanding cross-cultural management* (3rd ed.). Pearson.

9. Reference Books

1. Aswathappa, K., & Dash, S. (2020). *International human resource management* (1st ed.). McGraw Hill.
2. Thomas, D. C. (2014). *Cross-cultural management* (2nd ed.). Sage Publications.
3. Holden, N. (2012). *Cross-cultural management: A knowledge management perspective* (1st ed.). Prentice Hall.

COURSE CODE	COURSE NAME	L	T	P	C
2432MG1614	HR METRICS AND ANALYTICS	3	0	0	3

1. Preamble

In the era of data-driven decision-making, the role of Human Resource Management has evolved from a traditional administrative function to a strategic business partner. This course on HR Analytics and Metrics aims to equip students with the knowledge and skills necessary to leverage data and analytics to drive strategic HR decisions and improve organizational outcomes.

2. Prerequisite

Students taking the HR Analytics and Metrics course should have a foundational understanding of Human Resource Management, including core functions like recruitment, performance management, and employee development, data interpretation and Excel or data visualization tools is recommended to effectively analyze and interpret HR data.

3. Links to Other Courses

Business strategy, Performance Management Systems, Research Methods and Change Management.

4. Course Educational Objectives

Through this course the students will be able to: -

1. Understand the evolution and strategic role of HR metrics in transforming HR from an administrative to a data-driven strategic function.
2. Develop competency in aligning HR practices with organizational strategy through alignment analytics and stakeholder mapping.
3. Introduce descriptive analytics tools for data exploration, segmentation, and dashboard creation to derive business insights.

5. Course Outcomes

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

CO's	Course Outcomes	Level of Learning domain (Based on Revised Bloom's)
C01	Explain the importance of HR metrics, driven HR in business strategy and talent analytics framework.	K2
C02	Build HR process, organization process, workforce planning and human capital strategy.	K3
C03	Examine HR Metrics and Audits.	K4
C04	Analyze descriptive analytics, HR dashboards, business insights and Key performance indicator catalogue creation.	K4
C05	Measure Predictive and Prescriptive Analytics.	K5

6. Correlation of CO's with PO's

CO Nos.	PO1	PO2	PO3	PO4	PO5	PO6	PO7
C01	M	M	H	H			
C02						M	H
C03		M			L		M
C04	M		H		M	M	
C05			H	M			

H-High; M-Medium; L-Low

7. Course Contents

Unit I: Introduction

L-9

Definition and Importance of HR Metrics - Evolution of HR from Administrative to- Strategic Function - HR Analytics vs. HR Reporting - Role of Data - Driven HR in Business Strategy - Transition from transaction orientation to analytics orientation - Persuasive HR function - Role of analytics in HR - HR Analytic - Framework - People Capability Maturity Model - LAMP framework - HCM 21 framework - Talent analytics framework.

Unit II: Organization - Wide Alignment Analytics

L-9

Alignment Analytics - Linking HR process and organization process - Identify alignment opportunities - Stakeholder Alignment - HR Alignment Inventory - Workforce Planning - Measurement Map - Lead and Lag indicators - Business Impact - Human Capital Strategy.

Unit III: HR Metrics and Audits

L-9

Formulation of key performance indicators and key result areas - HR Metrics - Recruitment metrics - HR development metrics - AI in HR process -Talent retention metrics - HR cost benefit metrics - Performance metrics - Diversity Metrics - Engagement metrics - Safety and health metrics - Human capital ROI - HR Scorecard – HR Audits: Internal and External audit, Benchmarking and Competencies - AI Tools. for Recruitment.

Unit IV: Descriptive Analytics

L-9

Descriptive Analytics - Exploring the people data - Slice and dice of data - Cohort analysis - HR Dashboards - Segmentation - Business Insights - Key Performance Indicator Catalogue Creation- Real-time tracking of recruitment metrics.

Unit V: Predictive and Prescriptive Analytics

L-9

Predicting employee performance - Predicting employee turnover - Techniques to capture the fallouts of HR Practices - Impact of interventions - Evidence based human resource management - Organization change and improvement - Ethical standards.

TOTAL: 45 HOURS

8. Text Book

1. Banerjee, P., Gupta, M., & Pandey, J. (2019). *Practical applications of HR analytics*. Sage Publications.

9. Reference Books

1. Kavanagh, M. J., Thite, M., & Johnson, R. D. (2023), "*Human resource information systems: Basics, applications, and future directions*" (5th ed.), Sage Publications.
2. Edwards, M. R., & Edwards, K. (2019). *Predictive HR analytics: Mastering the HR metric* (2nd ed.). Kogan Page.

Course Code	Course Name	L	T	P	C
2432MG1615	INDUSTRY PSYCHOLOGY	3	0	0	3

1.Preamble:

This course examines the application of psychological concepts to improve workplace behavior and organizational effectiveness. It covers motivation, job satisfaction, and performance management, while equipping students to use psychological tools in HR decision-making.

2.Course Prerequisites

Foundational understanding of Human Resource Management,

3.Links to Other Courses

Human Resource Management, Organizational Behaviour, and Labour Laws.

4. Course Educational Objectives

1. Provides foundational knowledge of industrial and organizational psychology to understand workplace behaviour and decision-making.
2. Enhances the ability to analyze individual and group behaviour focusing on motivation, leadership, and organizational culture.
3. Equips students with skills to use psychological tools in employee selection, performance management, and interventions.
4. Addresses current workforce issues like diversity, inclusion, occupational stress, and work-life integration.
5. Promotes ethical and evidence-based decision-making in HR practices through psychological insights.

5.Course Outcomes

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

CO's	Course Outcomes	Level of Learning domain (Based on Revised Bloom's)
C01	Analyze key psychological principles and apply them in organizational contexts	K4
C02	Choose the right employee selection and assessment techniques	K3
C03	Infer knowledge of group dynamics, leadership, and organizational culture	K2
C04	Examine and assess employee well-being and workplace diversity issues	K4
C05	Identify contemporary challenges and psychological practices in the workplace	K3

6.Correlation of CO's with PO's

CO Nos.	PO1	PO2	PO3	PO4	PO5	PO6	PO7
C01	H	M			H		H
C02	M						H
C03		H	L	M			
C04				L	L	M	
C05				M			M

H-High; M-Medium; L-Low

7. Course Contents

Unit I: Introduction to Industrial Psychology **L-9**

General Psychology - History and evolution of industrial psychology- Research methods in organizational settings - Individual differences in the workplace- Ethics in industrial psychology practice-Psychology on the job - everyday life - an overview of the development - challenges - careers - practical problems - areas - Techniques - tools - and techniques - Ethical issues in organizational psychology.

Unit II: The Development of Human Resources **L-9**

Employee selection principles and techniques - the recruitment process - Assessment centres and psychological testing-fair employment practices - job and work analysis - interviews - assessment centres - Psychological testing - characteristics - overview of testing program - types of psychological tests - what do tests measure - problems with using psychological tests - Diversity and inclusion in the workplace.

Unit III: Organizational Psychology **L-9**

Group dynamics and team processes- Leadership styles in Indian context- Organizational culture and climate- Change management strategies- Industrial relations and conflict resolution- Power and politics in organizations- Conflict management and negotiation skills- Organizational climate assessment- Industrial relations and psychological contracts - Labor laws and psychological implications - the quality of work life - organisational change - socialisation - culture - informal groups - Artificial Intelligence and organizational psychology.

Unit IV: Characteristics of the Workforce **L-9**

Physical working conditions - work schedules - psychological and social issues - engineering psychology - employee safety and health - stress in the workplace - causes - sources - stress management-- Psychological dimensions of diversity- Unconscious bias in workplace decisions- Cross-cultural organizational psychology- Inclusive leadership practices- Age and generational differences at work - AI Tools For Workplace psychological issues..

Unit V: Contemporary Issues of a wellbeing in Industry Psychology **L-9**

Work-life integration in Indian context - Occupational stress and burnout - Virtual teams and remote work psychology - Digital transformation and psychological impacts- Ethical leadership in technological environments - Occupational health psychology- Work stress and coping mechanisms- Employee assistance programs in Indian industry- Psychological counseling at workplace- Worker participation and engagement strategies- Management and redressal of grievances - Management of positive discipline - Quality of Work Life (QWL) - Labour Welfare.

TOTAL: 45 HOURS

8. Text Books

- 1.Anderson, N., Ones, D. S., Kepir Sinangil, H., & Viswesvaran, C. (Eds.). (2003). *Handbook of industrial, work and organizational psychology*. Sage Publications.

9. Reference Books

1. Pandey, A., & Gupta, R. K. (2021). *Management in India: Trends and transition*. Sage Publications India.
2. Rao, P., & Rao, V. (2022). *Human resource management: Text and cases* 4th edition, Excel Books India.
3. Cascio, W. F., & Montealegre, R. (2022)of . *Technology and work psychology* (3rd ed.). Oxford University Press.

Course Code	Course Name	L	T	P	C
2432MG1616	LEARNING AND DEVELOPMENT	3	0	0	3

1.Preamble:

This course emphasizes the strategic role of employee development in achieving organizational success. It includes training needs analysis, learning theories, and the use of AI to enhance training outcomes.

2.Course Prerequisites

Basic understanding of HRM

3.Links to Other Courses

Organizational Behaviour,

4.Course Educational Objectives

1. To provide foundational and strategic insights into workplace learning and development, highlighting its role in enhancing organizational performance.
2. To understand key adult learning theories, behavioral principles, and instructional design models that inform the development of effective training programs.
3. To develop the ability to design, implement, and evaluate learning and development (L&D) initiatives using both traditional and technology-driven methods.
4. To explore the integration of L&D strategies within broader human resource and organizational development frameworks, ensuring alignment with business goals.
5. To familiarize students with contemporary digital tools.

5.Course Outcomes

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

CO's	Course Outcomes	Level of Learning domain (Based on Revised Bloom's)
C01	Explain the strategic role and significance of Learning and Development in organizations	K2
C02	Apply adult learning theories and instructional design principles to real-world training scenarios	K3
C03	Identify effective L&D programs using modern technologies and tools	K3
C04	Examine the effectiveness of learning interventions through feedback and assessment techniques	K4
C05	Summarize L&D strategies with organizational development and talent management practices	K2

6.Correlation of CO's with PO's

CO Nos.	PO1	PO2	PO3	PO4	PO5	PO6	PO7
C01	H	M			H		
C02	M	H					
C03					M	M	
C04		H		M			
C05			L				H

H-High; M-Medium; L-Low

7. Course Contents

Unit I: Understanding Learning & Development in Organisations

L-9

Concept and scope of L&D - Historical evolution of workplace learning - Roles and responsibilities of L&D professionals-Need and importance of learning and development in Organisations- Difference between training and learning-A systematic approach to L&D-Strategic role of L&D in an Organisation

Unit II: Learning Theories and Behavior modification

L-9

Andragogy - Learning styles and preferences - Kolb's experiential learning theory -Bloom's taxonomy -Kirkpatrick's Mode - Learning and Behaviour Modification-Workplace learning-Roles and L&D-Individual Learning curve -Cycle of L&D resource management-Training need Identification -Need Analysis- Adult Learning-Types of L&D-L&D and employee performance.

Unit III: Designing Effective Learning and Development Programs

L-9

Designing Effective Learning and Development Programs Planning a learning approach- Designing L&D in an Organisation-Competency based L&D-Vocational Education and Training- Training process -Implementing training programs-Types of training; Technical and soft-skill adaptation; Computer Assisted Learning-Integrated Learning Systems-Internal and External training.

Unit IV: Human Resource Development and Organisational Learning

L-9

Human Resource Development-Cross-cultural orientation-Employee Engagement-Capacity Building, Organisation Development-Knowledge Management-Organisational Learning-Leadership Development Management Development-E-learning-Distance Learning-Gamification-Audio-Visual Aids-Evaluation of L&D Programs-Feedback and Surveys- Implementation of outcome of the evaluation- Learning Management Systems.

Unit V: Learning Technologies and Digital Tools

L-9

-Learning Management Systems (LMS) - Learning Experience Platforms (LXP) - Use of AI, AR/VR in Training - Gamification and Simulation Tools - AI tools for gamification - Upskilling and Reskilling in Industry 4.0 - Personalized -Learning Paths using AI - Future of Work and L&D Strategy - ESG, DEI and Learning Interventions – Multitasking Business Impact on Learning and Development

TOTAL: 45 HOURS

8. Text Books

1.Harrison, R. (2005). Learning and Development. CIPD publishing.

9. Reference Books

1. Dessler, G., & Varkkey, B. (2005). *Human resource management* (15th ed.). Pearson Education India.
2. Gold, J., Holden, R., & Iles, P. (2017). *Human resource development: Theory and practice*. Bloomsbury Publishing.
3. Lynton, R. P., & Pareek, U. (2011). *Training for development*. SAGE Publishing India.
4. Janakiraman, B. (2007). *Training & development: Indian text edition*. John Wiley & Sons.

Course Code	Course Name	L	T	P	C
2432MG1617	TALENT MANAGEMENT	3	0	0	3

1.Preamble

This course explores strategic talent practices like workforce planning, succession, and leadership development using tools such as AI.

2.Course Prerequisites

HRM fundamentals.

3.Links to other courses

It connects with Recruitment and Selection, Performance Management, Strategic HRM, Leadership Development, and HR Analytics.

4.Course Educational Objectives

1. Understanding the principles and strategic importance of talent management for organizational success.
2. Developing practical skills in competency modeling and talent acquisition aligned with business needs.
3. Evaluating organizational performance and succession planning for data-driven decision-making.
4. Enhancing talent development and retention strategies, including compensation and leadership growth.
5. Designing technology-driven solutions for managing a diverse, global, and virtual workforce effectively.

5.Course Outcomes

CO's	Course Outcomes	Level of Learning domain (Based on Revised Bloom's)
C01	Interpret the core concepts and strategic importance of talent management in organization	K2
C02	Apply competency models and talent acquisition strategies to align with business goals	K3
C03	Analyze the effectiveness of performance management and succession planning practices	K4
C04	Select the apt talent retention and development strategies, compensation and leadership	K3
C05	Discover the technology-enabled solutions for managing global and virtual talent	K4

6.Correlation of COs with POs

CO Nos.	P01	P02	P03	P04	P05	P06	P07
C01	H	M			H		
C02	M	H					
C03		H		L	M		
C04			M	L	M		
C05				M		M	H

H-High; M-Medium; L-Low

7. Course Contents

Unit I: Introduction

L-9

Talent Management - Definition - Need and Importance - Focus Areas in Talent Management - Role of HR in talent management - Building Blocks of Talent Management Framework - Role and importance of Job Core Competencies - Talent Value Chain - Understand and explain creation of a Diversity initiative into the Talent management process- Practices of talent management in organisations-Talent management scenario in India.

Unit II: Building Blocks of Talent Management

L-9

Developing the building blocks of talent management - Key Processes - E Recruitment systems - Talent Management Model - Talent acquisition - Talent Identification and Business Alignment - Strategic Trends in Talent Acquisition -Building competency models-Types of competency models-Competencies Defined-Identifying Competencies-Steps in creating competency models-Competency mapping and methods of competency mapping-Use of competency models in talent management

Unit III: Elements of Talent Management

L-9

Talent planning - Elements of Talent Planning - Performance Management Systems in organizations and their relationship between rewards to performance - Monetary and Non-monetary benefits - Understanding performance and determinants of performance-Understanding performance management system Develop a Career Track Planning process - Succession Planning - Evaluating Internal and External Recruitment Strategies selection techniques - Talent Management Strategy.

Unit IV: Performance Management and Rewards

L-9

Talent Engagement - Strategic Compensation plan for Talent Engagement - Talent Development: Coaching and Training - Managing Leadership Talent - Leadership Development relationship of the Compensation Plan - Talent Retention - Sustainable Talent Management and Reward Model.

Unit V: Emerging Trends in Talent Management

L-9

HRIS systems and Talent Management System - Using information technology to support a TM system - Data Security and Reporting Essentials in a Talent Management System - Contemporary Issues and Challenges in Talent Management - Outsourcing, Contingent, Contract/temporary workforce - Managing Global and Virtual Talent.

TOTAL: 45 HOURS

8. Text Books

1.Berger, L. A., & Berger, D. R. (2017). *The talent management handbook: Creating organizational excellence by identifying, developing, and positioning your best people*. McGraw Hill.

9. Reference Books

1. Joshi, G., & Vohra, V. (2017). *Talent management*. Cengage Learning.
2. Hasan, M., Singh, A. K., & Dhamija. (2017). *Talent management in India: Challenges and opportunities*. Atlantic Publication.
3. Schweyer, A. (2010). *Talent management systems: Best practices in technology solutions for recruitment, retention and workforce planning*. Wiley.

PROGRAMME ELECTIVE

SEMESTER III

BUSINESS ANALYTICS

Sl. No.	Course Code	Course Name	L	T	P	C
1	2432MG1618	Artificial Intelligence and Big Data in Business	3	0	0	3
2	2432MG1619	Business Analytics and Intelligence	3	0	0	3
3	2432MG1620	Data Management and Visualization	3	0	0	3
4	2432MG1621	Digital Transformation	3	0	0	3
5	2432MG1622	Enterprise Resource Planning	3	0	0	3
6	2432MG1623	Information Security and Risk Management	3	0	0	3
7.	2432MG1636	Machine Learning	3	0	0	3

Course Code	Course Name	L	T	P	C
2432MG1618	ARTIFICIAL INTELLIGENCE AND BIG DATA IN BUSINESS	3	0	0	3

1. Preamble

The rapid evolution of technology and data-driven insights has transformed industries, economies, and societies, leading to an era dominated by Artificial Intelligence (AI) and Big Data. This course provides a comprehensive foundation in Generative AI, Big Data, and their applications in modern business environments. It explores intelligent systems, machine learning techniques, natural language processing, and their role in business transformation.

2. Prerequisite

Basic knowledge of Information Technology.

3. Links to Other Courses

Functional electives & Projects.

4. Course Educational Objectives

Through this course the students will be able to;

1. To gain insights into intelligent systems, their evolution, and their impact on modern businesses.
2. To learn supervised and unsupervised learning techniques to evaluate AI models effectively.
3. To extract insights from textual data, conduct sentiment analysis, and improve business intelligence.

5. Course Outcomes

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

Cos	Course Outcomes	Level of Learning domain (Based on Revised Bloom's)
CO1	Explain the fundamentals of Generative AI and Big data.	K2
CO2	Outline the supervised and unsupervised learning techniques.	K2
CO3	Make use of the insights from textual data, sentiment analysis to improve business intelligence	K3
CO4	Examine Generative AI, Large Language Models and deep learning for automation and strategic planning.	K4
CO5	Utilize future opportunities in AI and Big data	K3

6. Correlation of CO's with PO's

CO Nos.	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1							H
CO2	H	H		H	M		H
CO3		H	M	H	M	H	H
CO4	H	H	M	H		H	H
CO5	H			H		H	H

H- High; M-Medium; L-Low

7. Course Contents

Unit I: Fundamentals of Generative Artificial Intelligence and Big Data **L-9**

Intelligent Systems: Evolution of Technology and Business- Types of Digital Data, Introduction to Big Data, Big Data Analytics - Overview of Generative artificial intelligence and big data analytics- History of Hadoop - Evolution of AI - Role of AI and big data in business transformation - Ethical Considerations in AI and big data applications - Business use cases and success stories

Unit II: Big Data Analytics and Machine Learning **L-9**

Big Data Environments - Apache Big Data Platform - Big data storage and retrieval: noSQL, GraphDB, Hive, Pig - Big data distributed computing: Analysing Data using Hadoop and Spark - MapReduce - Supervised learning techniques (regression, classification) - Unsupervised learning techniques (clustering, dimensionality reduction) - Evaluation and validation of machine learning models - Feature engineering and selection

Unit III: Natural Language Processing and Text Analytics **L-9**

Introduction to natural language processing (NLP) - Text preprocessing and feature extraction - Sentiment analysis and opinion mining - Named entity recognition and text classification

Unit IV: Artificial Intelligence in Business **L-9**

Learning from Big Data - Meta-heuristics: Genetic Algorithm, Scatter Search, Tabu Search, Particle Swarm Intelligence, Ant Colony Optimization, Fuzzy Logic Systems, Case-based reasoning, Artificial Neural Networks - Deep Learning - Deep Reinforcement Learning - Large Language Models- Generative Pre-trained Transformer (GPT)

Unit V: Models in Business Analytics **L-9**

Models in Business Analytics: Introduction, Fine-tuning GPT models for business applications - Generative AI - GPT applications in chatbots and virtual assistants - Applications, Opportunities, Challenges - Future trends and advancements in AI and big data

TOTAL: 45 HOURS

8. Text Books

1. Russell, S., & Norvig, P. (2024). Artificial Intelligence: A Modern Approach (4th ed.). Pearson.
2. Doug Rose, (2021). Artificial Intelligence for Business, 2nd Edition, Pearson.
3. Seema Acharya and Subhashini Chellappan, (2025), Big Data and Analytics, 2nd Edition, Wiley.

9. Reference Books

4. Witten, I. H., Frank, E., Hall, M. A., & Pal, C. J. (2016). *Data Mining : Practical Machine Learning Tools and Techniques* (4th edition). Morgan Kaufmann.
5. Alto, V. (2023). *Modern Generative AI with ChatGPT and OpenAI Models: Leverage the Capabilities of OpenAI's LLM for Productivity and Innovation with GPT3 and GPT4* (1st edition). Packt Publishing.
6. Babcock, J., & Bali, R. (2021). *Generative AI with Python and TensorFlow 2: Create images, text, and music with VAEs, GANs, LSTMs, and Transformer models*. Packt Publishing Limited.

Course Code	Course Name	L	T	P	C
2432MG1619	BUSINESS ANALYTICS AND INTELLIGENCE	3	0	0	3

1. Preamble

In today's data-driven world, businesses rely on analytics to make informed decisions and optimize operations. Business analytics combines statistical techniques, artificial intelligence, and big data to extract actionable insights. This course provides a strong foundation in decision-making frameworks, analytics methodologies, and AI-driven tools for modern businesses.

2. Prerequisite

Basic knowledge of Information Technology

3. Links to Other Courses

Functional electives & Projects.

4. Course Educational Objectives

Through this course the students will be able to;

1. To learn decision-making models, business intelligence frameworks, and statistical analysis techniques.
2. To develop expertise in descriptive, predictive, and prescriptive analytics for data-driven business insights.
3. To utilize regression, classification, clustering techniques, and data visualization tools like Power BI/Tableau.

5. Course Outcomes

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

Cos	Course Outcomes	Level of Learning domain (Based on Revised Bloom's)
CO1	Outline the business intelligence frameworks and statistical analysis techniques in business	K2
CO2	Apply expertise in descriptive, predictive, and prescriptive analytics for data-driven business insights	K3
CO3	Make use of regression, classification, clustering techniques, and data visualization tools like Power BI/Tableau	K3
CO4	Discover marketing models, information security, and AI-powered strategies.	K4
CO5	Identify GPT models for text analytics while addressing ethical concerns in AI-powered decision-making	K3

6. Correlation of CO's with PO's

CO Nos.	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	H	H					H
CO2	H	H		H	M	H	H
CO3		H		H		H	H
CO4	H	H	M	H	M	H	H
CO5	H		M	H		H	H

H- High; M-Medium; L-Low

7. Course Contents

Unit I: Fundamentals of Business Analytics

L-9

Decision-Making and Analytics: Decision-Making Process, Decision Support Systems - Business Intelligence Framework - Overview of statistical analysis techniques - Business Analytics Overview: Descriptive Analytics, Predictive Analytics, Prescriptive Analytics - Big Data Analytics - Artificial Intelligence- Analytics Tools

Unit II: Analytics and Business

L-9

Descriptive Analytics: Data warehousing, Business Reporting, Visual Analytics, and Business Performance Management - Prescriptive Analytics: Model-based Decision Making, Modeling and Analysis - Multi-objective optimization and decision-making - Simulation and risk analysis for decision support - Automated Decision Systems and Expert Systems, Knowledge Management and Collaborative Systems

Unit III: Algorithms and Tools

L-9

Predictive Analytics: Data Mining and Exploration, Techniques for Predictive Modelling, Text Analytics, Web Analytics, and Social Analytics -Regression Analysis and Time Series Forecasting - Classification and decision tree algorithms - Association Rules - Clustering techniques for customer segmentation – Data analytical tools: Power BI/Tableau

Unit IV: Applications

L-9

Applications: Marketing Models, Logistics and Production Models, Data Envelopment Analysis - Information Strategy - Security - Overview of artificial intelligence and its applications

Unit V: Natural Language Processing

L-9

Introduction to natural language processing (NLP) - Leveraging GPT models for text analytics and insights - Ethical considerations in AI-powered analytics

TOTAL: 45 HOURS

8. Text Books

1. Sharda, R., Delen, D., & Turban, E. (2020). Business Intelligence, Analytics, and Data Science: A Managerial Perspective (5th ed.). Pearson.
2. Evans, J.R. (2020). Business Analytics: Methods, Models and Decisions(3rd Edition), Pearson.
3. Russell, S., & Norvig, P. (2024). Artificial Intelligence: A Modern Approach (4th ed.). Pearson.

9. Reference Books

1. James, G., Witten, D., Hastie, T., & Tibshirani, R. (2013). An Introduction to Statistical Learning (Vol. 103). Springer New York.
<https://doi.org/10.1007/978-1-4614-7138-7>
2. Provost, F., & Fawcett, T. (2013). Data Science for Business, O' Reilly.
3. Hastie, T., Tibshirani, R., & Friedman, J. (2009). The Elements of Statistical Learning: Data Mining, Inference, and Prediction (2nd ed.). Springer.

Course Code	Course Name	L	T	P	C
2432MG1620	DATA MANAGEMENT AND VISUALISATION	3	0	0	3

1. Preamble

Data management is at the heart of modern business operations, driving efficiency, security, and decision-making. Organizations increasingly rely on structured data systems, database technologies, and visual analytics to extract value from vast amounts of information. This course provides a comprehensive overview of data management principles, covering database design, data governance, blockchain applications, and advanced visualization techniques. Through exploration of SQL, data quality assurance, and analytics tools, students will gain the knowledge necessary to implement effective data-driven strategies.

2. Prerequisite

Basic knowledge of Information Technology.

3. Links to Other Courses

Functional electives & Projects.

4. Course Educational Objectives

Through this course the students will be able to;

1. To explore the role of data as an asset, governance frameworks, and business applications.
2. To learn SQL fundamentals, data integrity measures, and policies for data security and risk mitigation.
3. To investigate smart contracts, decentralized data storage, and privacy considerations.

5. Course Outcomes

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

Cos	Course Outcomes	Level of Learning domain (Based on Revised Bloom's)
CO1	Inter the role of data as an asset, governance frameworks, and business applications.	K2
CO2	Explain SQL fundamentals, data integrity measures, and policies for data security	K2
CO3	Analyze smart contracts, decentralized data storage, and privacy considerations.	K4
CO4	Examine spreadsheets and advanced tools for presenting insights using various graphical techniques	K4
CO5	Discover dynamic dashboards, network analytics, and mapping techniques for business intelligence	K4

6. Correlation of CO's with PO's

CO Nos.	P01	P02	P03	P04	P05	P06	P07
CO1		H					H
CO2		H		H	M		H
CO3	M	H		H		H	H
CO4	M	H	M	H	M	H	H
CO5		H	M	H		H	H

H- High; M-Medium; L-Low

7. Course Contents

Unit I: Introduction to Data Management

L-9

Data as an Asset - Overview of data management (DM) concepts and processes - Scope of data management - Value creation through DM, critical challenges for DM, DM and business process management, DM and IT Management, DM lifecycle, Types of data - Data governance – Relational database management systems - Data modelling and database design - Introduction to blockchain technology

Unit II: Database Management

L-9

Structured Query Language (SQL) fundamentals - Data integrity and quality assurance: Data Architecture, Data Cleaning, Data Manipulation, Handling Missing data, Data Reduction, Trimming, Data Integration, Data Quality, Risk and Risk Mitigating Measures, Data Security, Data Centre Management – Business Intelligence, Big Data, Ethical aspects of data management, Data management policy

Unit III: Blockchain Technology

L-9

Blockchain Technology for Data Management: Applications of blockchain in data management - Smart contracts and decentralized data storage - Privacy and security considerations in blockchain-based data management

Unit IV: Data Visualization

L-9

Introduction to spreadsheet tools for data management - Data organization and manipulation in spreadsheets- Advanced spreadsheet functions and formulas - Data visualization techniques using spreadsheets - Visual representation methods: Line chart, Steam and Leaf plots, bar diagrams, histograms, density plots, violin plot & Gantt Chart.

Unit V: Advanced Data Visualization tools

L-9

Introduction to advanced data visualization tools and techniques - Interactive and dynamic visualization options - Geospatial visualization and mapping techniques - Network visualization and social network analysis

TOTAL: 45 HOURS

8. Text Books

1. Elmasri, R., & Navathe, S. B. (2016). Fundamentals of Database Systems (7th ed.). Pearson.
2. Few, S. (2009). Now You See It: Simple Visualization Techniques for Quantitative Analysis. Analytics Press.

9. Reference Books

1. Nakamoto, S. Nakamoto, S. (2008). Bitcoin: A Peer-to-Peer Electronic Cash System. Retrieved from [Bitcoin.org](https://bitcoin.org).
2. Kirk, A. (2016). Data Visualisation: A Handbook for Data Driven Design. Sage Publications.

Course Code	Course Name	L	T	P	C
2432MG1621	DIGITAL TRANSFORMATION	3	0	0	3

1. Preamble

Digital transformation has become a fundamental aspect of modern businesses and industries, reshaping traditional models and fostering innovation across various sectors. The growing adoption of emerging technologies, digital business ecosystems, and advanced software management practices has created new opportunities and challenges for organizations seeking to enhance efficiency, customer experience, and competitiveness.

2. Prerequisite

Basic knowledge of Information Technology.

3. Links to Other Courses

Functional electives & Projects.

4. Course Educational Objectives

Through this course the students will be able to;

1. To define digital transformation and analyze its scope, rationale, drivers, and challenges within various industries.
2. To examine multi-sided platforms, disruptive innovation, value co-creation, and structural transformation facilitated by digital strategies.
3. To investigate the role of artificial intelligence, machine learning, cloud computing, big data analytics, IoT, and blockchain in digital transformation.

5. Course Outcomes

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

Cos	Course Outcomes	Level of Learning domain (Based on Revised Bloom's)
CO1	Explain digital transformation and analyze its scope, and challenges within various industries.	K2
CO2	Discover multi-sided platforms, disruptive innovation, value co-creation, and structural transformation facilitated by digital strategies	K4
CO3	Examine the role of artificial intelligence, machine learning, cloud computing, big data analytics, IoT, and blockchain in digital transformation.	K4
CO4	Apply the knowledge of project management methodologies in digital initiatives.	K3
CO5	Analyze organizational readiness, within various industry verticals	K4

6. Correlation of CO's with PO's

CO Nos.	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	H			M			H
CO2		M					H
CO3	H		L		M		H
CO4	H				M		
CO5		M		M			H

H- High; M-Medium; L-Low

7. Course Contents

Unit I: Introduction to Digital Transformation

L-9

Definition and scope of digital transformation - The rationale for Digital Transformation - Drivers and challenges of digital transformation - Digital transformation frameworks and models - Digital Platforms:

Unit II: Digital Business Ecosystems

L-9

Digital Business Ecosystems, Multi-sided Platform Business, Platform Economy, Value Co-creation, Disruptive Innovation and Business Strategy, Disruption of business processes, Technology Adoption, Structural Transformation, Transformation enabled by Business Analytics - Strategies and leadership for successful digital transformation - Introduction to software management practices

Unit III: Emerging Technologies for Digital Transformation

L-9

Artificial intelligence and machine learning in digital transformation - Cloud computing and its impact on digital transformation - Internet of things and its role in driving digital transformation - Big data analytics and data-driven decision-making - Blockchain in business

Unit IV: Software Management Concepts for Digital Transformation

L-9

Software Management Concepts - Rapid Prototyping - Project Management: Waterfall methodology, Agile, Software Management Practices: DevOps, Site Reliability Engineering - Integrating software management concepts into digital transformation - Continuous integration and continuous delivery (CI/CD) pipelines - Managing software quality and reliability in digital transformation- Jira and Azure project management tools.

Unit V: Implementing and Managing Digital Transformation

L-9

Assessing organizational readiness for digital transformation - Change management and organizational culture in digital transformation - Digital customer experience and personalization strategies - Measuring and evaluating the impact of digital transformation initiatives - Digital Transformation (in Education, Healthcare, other verticals), Data business and Data Security, Automation

TOTAL: 45 Hours

8. Text Books

1. Westerman, G., Bonnet, D., & McAfee, A. (2014). Leading Digital: Turning Technology into Business Transformation. Harvard Business Review Press.
2. Seibel, T. M. (2019). Digital Transformation: Survive and Thrive in an Era of Mass Extinction. Rosetta Books.

9. Reference Books

1. Ross, J. W., Sebastian, I., & Beath, C. (2019). Digital to the Core: Remaking the Enterprise David Rogers, "The Digital Transformation Playbook – Rethink Your Business for the Digital Age", Columbia Business School Publishing.
1. Kane, G. C., Nguyen Phillips, A., Copulsky, J., & Andrus, G. R. (2019). The Technology Fallacy: How People Are the Real Key to Digital Transformation. MIT Press.

Course Code	Course Name	L	T	P	C
2432MG1622	ENTERPRISE RESOURCE PLANNING	3	0	0	3

1. Preamble

Enterprise Resource Planning (ERP) systems play a crucial role in modern business operations by integrating various functions and streamlining processes. This course provides a comprehensive understanding of ERP systems, Supply Chain Management (SCM), and Customer Relationship Management (CRM), emphasizing their selection criteria, benefits, and challenges. Learners will explore key aspects of data management, business process reengineering, and ERP implementation methodologies, along with the latest technological advancements such as AI, IoT, and Blockchain.

2. Prerequisite

Basic knowledge of Information Technology

3. Links to Other Courses

Functional electives & Projects.

4. Course Educational Objectives

Through this course the students will be able to;

1. To impart fundamental knowledge of ERP, SCM, and CRM systems, enabling students to understand their significance, selection criteria, and implementation challenges.
2. To develop analytical skills in managing enterprise data through data warehousing, mining, and online analytical processing, supporting strategic decision-making in organizations.
3. To equip students with expertise in ERP system configuration, business process mapping, and change management strategies, ensuring effective implementation and user adoption.

5. Course Outcomes

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

Cos	Course Outcomes	Level of Learning domain (Based on Revised Bloom's)
CO1	Interpret the fundamental knowledge of ERP, SCM, and CRM Systems	K2
CO2	Apply analytical skills in managing enterprise data for supporting strategic decision-making in organizations.	K3
CO3	Examine the ERP system configuration, business process mapping, and change management strategies, and user adoption.	K4
CO4	Discover various business modules within ERP.	K4
CO5	Analyse real-world ERP integration and optimization by exploring risk analysis, and security measures in enterprise environments.	K4

6. Correlation of CO's with PO's

CO Nos.	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	H			H			L
CO2		M			H		
CO3	H		L		H		
CO4	H			H	H	L	
CO5		M		H			

H- High; M-Medium; L-Low

7. Course Contents:

Unit I: Introduction to Enterprise Systems

L-9

Enterprise Resources Planning (ERP): Features, Selection criteria, Merits, Issues and challenges in implementation - Supply Chain Management (SCM): Features, Selection criteria, Merits, Issues and challenges in implementation - Customer Relationship Management (CRM): Features, Selection criteria, Merits, Issues and challenges in implementation

Unit II: Data Management

L-9

Data management: Data warehousing, Data mining, Online Analytical Processing - Business Process Re-engineering (BPR) - Overview of enterprise resource planning and its importance - Evolution and benefits of ERP systems - Key modules and functionalities of ERP systems - ERP implementation life cycle and project management

Unit III: Developing Enterprise Resource Planning Systems

L-9

Business process mapping and documentation, Analysis of organizational requirements for ERP implementation, Gap analysis and process reengineering, Change management and user adoption in ERP projects - ERP System Configuration and Customization: System configuration and master data management, Customization options and best practices, Workflow management and automation, Integration of ERP systems with external applications

Unit IV: Business Modules in an ERP

L-9

Business modules in an ERP package, Finance, Controlling (Management Accounting), Manufacturing, Human resources, Plant maintenance, Materials management, Quality management, Sales and distribution - ERP Market - Closed source and open-source market – SAP/Oracle -Basic concepts

Unit V: ERP Integration and Optimization

L-9

ERP system Installation Options; Risk identification analysis, System projects, Demonstration of the system failure method, System architecture and ERP - Stabilization period, Support mechanism and activities, ERP and related technologies; Business Intelligence, Product Data Management, Electronic Data Interchange, E-commerce, Enabling technologies: Internet, e-mail, mobile phones, Bar code system, Performance monitoring and system maintenance - Data analytics and reporting in ERP systems - Continuous improvement and optimization strategies - Security and governance in ERP environments

TOTAL: 45 HOURS

8. Text Books

1. Leon, A. (2014). *Enterprise Resource Planning*. McGraw Hill Education.
2. Chopra, S., & Meindl, P. (2019). *Supply Chain Management: Strategy, Planning, and Operation* (7th ed.). Pearson.

9. Reference Books

1. Sumner, M. (2005). *Enterprise Resource Planning*. Pearson Education.
2. Monk, E., & Wagner, B. (2012). *Concepts in Enterprise Resource Planning* (4th ed.). Cengage Learning.
3. Buttle, F., & Maklan, S. (2019). *Customer Relationship Management: Concepts and Technology*, 4th Edition, Routledge.

Cose Code	Course Name	L	T	P	C
2432MG1623	INFORMATION SECURITY AND RISK MANAGEMENT	3	0	0	3

1. Preamble

Information security is a critical aspect of modern business operations and personal data protection. With the increasing reliance on digital technologies, organizations and individuals face growing security threats and vulnerabilities. This course provides a comprehensive foundation in information security principles, risk management, security governance, and compliance, equipping learners with the necessary skills to safeguard sensitive information.

2. Prerequisite

Basic knowledge of Information Technology

3. Links to Other Courses

Functional electives & Projects.

4. Course Educational Objectives

Through this course the students will be able to;

1. To familiarize students with fundamental information security concepts, risk management strategies, and governance frameworks to build a strong foundation in security principles.
2. To develop analytical skills for identifying, assessing, and mitigating security threats and vulnerabilities using industry-standard risk assessment methodologies.
3. To equip students with technical and managerial knowledge of security controls, encryption techniques for effective cybersecurity management.

5. Course Outcomes

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

Cos	Course Outcomes	Level of Learning domain (Based on Revised Bloom's)
CO1	Outline the fundamental information security concepts to build a strong foundation in security principles.	K2
CO2	Make use of analytical skills for identifying, assessing, and mitigating security threats and vulnerabilities	K3
CO3	Apply technical and managerial knowledge of security controls, and cloud-based security practices	K3
CO4	Examine security risk management methodologies, focusing on disaster recovery, and business continuity planning.	K4
CO5	Explain information security policies, procedures, and compliance standards in cybersecurity.	K2

6. Correlation of CO's with PO's

CO Nos.	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	M			M			M
CO2		L			M		
CO3	M		M		M		
CO4						L	
CO5			M	M			M

H- High; M-Medium; L-Low

7. Course Contents

Unit I: Introduction to Information Security

L-9

Overview of information security principles and concepts - Social Engineering - Human behaviour and Information Security - Risk Management - Complexity of Risk Management - Information Security Risk Management - Stakeholders and Communication - Security governance and compliance - Legal and ethical considerations in information security - Security Policies, standards, and procedures

Unit II: Threats, Vulnerabilities and Risk Assessment

L-9

Types of threats to information systems - Common vulnerabilities and attack vectors - Risk assessment methodologies - Measuring Risks - Quantitative and qualitative risk analysis -

Unit II: Information Security Controls

L-9

Information Security Controls: Access control mechanisms and models - Network security and perimeter defence - Encryption and cryptographic techniques - Security in the cloud and mobile environments- Risk Mitigation Plan.

Unit IV: Information Security Risk Management

L-9

Risk management frameworks and methodologies - Incident response and disaster recovery planning- Security awareness and training - Business continuity and IT governance - Information Security Governance – Information Audit

Unit V: Information Security Policy

L-9

Information Security Policy: Information Security Policy Framework - Information Security Procedures and Standards - Problems with Policies - Decision Making from a Managerial Perspective

TOTAL: 45 HOURS

8. Text Books

1. Pfleeger, C. P., & Pfleeger, S. L. (2015). *Security in Computing* (5th ed.). Pearson.
2. Stallings, W., & Brown, L. (2018). *Computer Security: Principles and Practice* (4th ed.). Pearson.

9. Reference Books

1. Timothy P. Layton, (2009). Information Security – Design Implementation Measurement and Compliance, Auerbach Publishing.
2. Shamim, M., & Zeadally, S. (2021). *Cybersecurity and Privacy in the Cloud: Risks and Mitigation Strategies*. Springer.
3. Whitman, M. E., & Mattord, H. J. (2021). *Principles of Information Security* (6th ed.). Cengage Learning.

Cose Code	Course Name	L	T	P	C
2432MG1636	MACHINE LEARNING	3	0	0	3

1. Preamble

Machine Learning (ML) is a transformative field that empowers systems to learn from data and improve performance without explicit programming. This course introduces foundational concepts, learning paradigms, classification techniques, reinforcement learning, and the integration of ML with Internet of Things (IoT).

2. Prerequisite

Basic knowledge of Information Technology

3. Links to Other Courses

Functional electives & Projects.

4. Course Educational Objectives

Through this course the students will be able to;

1. Understand the fundamental principles and goals of machine learning systems.
2. Explore various learning paradigms including supervised, unsupervised, and reinforcement learning.
3. Analyze classification techniques and their applicability to real-world problems.
4. Apply neural network architectures and deep learning models to solve complex tasks.
5. Evaluate the role of machine learning in IoT applications and emerging technological trends.

5. Course Outcomes

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

Cos	Course Outcomes	Level of Learning domain (Based on Revised Bloom's)
CO1	Outline the key concepts of learning systems, neural networks, and activation functions.	K2
CO2	Explain different types of learning algorithms and their training methodologies.	K2
CO3	Apply classification techniques and ensemble methods to solve data-driven problems.	K3
CO4	Analyze reinforcement learning models using MDPs, Bellman equations, and LQR techniques.	K4
CO5	Interpret the performance of ML models in IoT applications using recent classification trends.	K2

6. Correlation of CO's with PO's

CO Nos.	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	H						H
CO2	H	H					H
CO3	H	H			M		H
CO4	H	H		M			H
CO5	H	H	L	M	M	L	H

H- High; M-Medium; L-Low

7. Course Contents

Unit I: Introduction

L-9

Introduction – Definition of Learning System – Goals and applications of Machine learning – Aspects of developing a learning system – training experience, concept representation – function approximation - Training data – Linear perception as Neurons – Neural nets – Working of Neural nets – Layers of neural networks and deep learning – Activation functions – Feed Forward Neural Networks – Limitations of Neurons – Deep Belief Networks (DBNs) – Large Scale DBNs – Large Scale Convolutional Neural Networks.

Unit II: Types of Learning

L-9

Supervised learning – Unsupervised learning – Overview of Classification – MLP in practice – Setup, Training, Test and validation datasets – Overfitting and underfitting – Types of machine learning algorithm

Unit III: Classification Families

L-9

Linear discriminative – Non-linear discriminative – Decision trees – Probabilistic (conditional and generative) – K nearest Neighbour learning – distance weighted nearest Neighbour Algorithm – Curse of dimensionality – Ensemble learning

Unit IV: Reinforcement learning and control

L-9

Markov Decision Processes (MDP) – Bellman Equations – Value Iteration and Policy Iteration – Linear Quadratic Regulation (LQR) – Introduction to Genetic Algorithm (GA) – LQG Q Learning – Policy versus Value learning - POMDPs

Unit V: IOT and Machine Learning

L-9

Internet of Things (IOT) - Recent Trends in various learning techniques of Machine learning and Classification methods for IOT applications – Various applications for IOT applications

TOTAL: 45 HOURS

8. Text Book:

1. Rajiv Chopra, (201). Machine Learning. 2nd Edition, Khanna Book Publishing Co. (P) Ltd., New Delhi

9. Reference Books

1. Kevin P. Murphy, (2012). Machine Learning A Probabilistic Perspective, MIT Press.
2. Ethem Alpaydin. (2016). Introduction to Machine Learning Phi Learning.
3. Mehryar Mohri, Afshin Rostamizadeh, Ameet Talwalkar, (2018), Foundation of Machine Learning, MIT Press.

PROGRAMME ELECTIVE
SEMESTER III
LOGISTICS AND SHIPPING MANAGEMENT

Sl. No.	Course Code	Course Name	L	T	P	C
1	2432MG1624	Logistics and Supply Chain Management	3	0	0	3
2	2432MG1625	Containerization and Multi Modal Transport	3	0	0	3
3	2432MG1626	Port and Terminal Management	3	0	0	3
4	2432MG1627	Maritime Law and Insurance	3	0	0	3
5	2432MG1628	Air Cargo Management	3	0	0	3
6	2432MG1629	Distribution and Warehouse Management	3	0	0	3

Course Code	Course Name	L	T	P	C
2432MG1624	LOGISTICS AND SUPPLY CHAIN MANAGEMENT	3	0	0	3

1. Preamble

This course provides students with a comprehensive understanding of logistics and supply chain management principles. It highlights the strategic importance of logistics in gaining competitive advantage, the role of transportation and packaging, and advances in technology, sustainability, and global sourcing.

2. Prerequisite

Basic knowledge of Logistics and Supply Chain Management.

3. Links to Other Courses

All Diplomas, post graduate diploma, master degree courses related to logistics.

4. Course Educational Objectives

Through this course the students will be able: -

1. To provide foundational knowledge on logistics management and its role in achieving business competitiveness.
2. To enable students to understand and apply transportation, packaging, and supply chain network design strategies.
3. To equip learners with insights into emerging technologies, global trends, and sustainable practices in logistics and supply chains.

5. Course Outcomes

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

Cos	Course Outcomes	Level of Learning domain (Based on Revised Bloom's)
CO1	Explain the the fundamental concepts of logistics and its role in competitive strategy.	K2
CO2	Apply transportation modes, packaging principles, and logistics operations.	K3
CO3	Apply the supply chain strategies and performance measures using real-world case examples.	K3
CO4	Analyze the effective distribution networks and pricing strategies using forecasting and models.	K4
CO5	Identify the current trends and technologies in logistics including sustainability and digitalization.	K3

6. Correlation Of CO's with PO's

CO Nos.	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	H			H			H
CO2	H	H				M	H
CO3	H	H	L	H	H		H
CO4	H	H		H	H		H
CO5	H	H		H	H	M	H

H- High, M-Medium, L-Low

7. Course Contents

Unit I: Logistics Management-Overview

L-9

Logistics Management: Definition - Objectives and scope - Logistics and Competitive Strategy - Competitive advantage - Gaining competitive advantage through logistics – customer service – 3PL and 4PL - Logistics value proposition – functions of logistics – logistical operations – Integrated logistics system - Global Logistics - Logistics KPI measurement , Digital Freight Platforms, Logistics E-Portal Systems

UNIT II: Transportation & Packaging

L-9

Transport functionality, principles and participants – Transportation Structure – Road, rail, water, air, pipeline – Transportation economics and pricing – documentation - packaging perspectives – packaging for materials handling efficiency – material handling systems - OOG cargo movement. E-way Bill, DG Cargo, Reefer Cargo, Oracle Transportation Management (OTM).

UNIT III: Supply Chain

L-9

Introduction - Objective - Importance - Decision Phases - Process views of supply chain - Enablers / Drivers of Supply Chain Performance - Supply chain strategy - Supply Chain Performance Measures - Challenges in supply chain - Push-Pull systems - Emerging models for Block chain Technology - Blockchain technology and factors affecting Supply Chain - Supply Chain finance. Supply Chain Visibility, Vendor Managed Inventory (VMI, Bullwhip Effect, Cold Chain Supply Chain, Supply Chain Analytics using Power BI dashboards, Procurement Management

UNIT IV: Distribution and Network

L-9

Distribution network design – design options – role of network in supply chain – framework for network design – models – forecast and forecasting methods – role of pricing and revenue management – pricing for multiple customer segments - Hub & Spoke Distribution Model , Last Mile Delivery, Route Optimization.

UNIT V: Current Trends

L-9

Logistics Information Systems - Need, characteristics and design - E-Logistics - Structure and Operation - Automatic Identification Technologies - Reverse Logistics - Scope, design and as a competitive tool - Agile Supply Chains - ONDC – National Logistics Policy - AI in Logistics , Green Logistics, Logistics Risk Assessment, SAP Logistics

TOTAL: 45 HOURS

8. Text Books

1. Bowersox, D. J., Closs, D. J., & Cooper, M. B. (2019). *Supply Chain Logistics Management* (6th ed.). McGraw-Hill Education.
2. Chopra, S., & Kalra, D. V. (2019). *Supply Chain Management: Strategy, Planning, and Operation* (7th ed.). Pearson Education India.

9. Reference Books

1. Saikumari, V., & Purushothaman, S. (2023). *Logistics and Supply Chain Management* (2nd rev. ed.). Sultan Chand & Sons.
2. Shah, J. (2009). *Supply Chain Management: Text and Cases* (1st ed.). Pearson Education India.
3. Lun, Y. H. V., Lai, K. H., & Cheng, E. T. C. (2010). *Shipping and Logistics Management*. Springer

Course Code	Course Name	L	T	P	C
2432MG1625	CONTAINERIZATION AND MULTIMODAL TRANSPORT	3	0	0	3

1. Preamble

This course introduces students to the modern practices of containerisation and the growing significance of multimodal transport in global logistics. It covers key operational, regulatory, and legal aspects of container movement, the structure of intermodal networks, and the handling systems involved.

2. Prerequisite

Basic understanding of transportation modes, logistics principles, and international trade concepts.

3. Links To Other Courses

Functional electives & Projects.

4. Course Educational Objectives

Through this course the students will be able: -

1. To introduce the fundamentals of containerisation and its impact on international logistics.
2. To enable students to understand and manage multimodal transportation systems and cargo operations.
3. To equip learners with knowledge of container handling systems, legal frameworks, and insurance policies in multimodal logistics.

5. Course Outcomes

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

Cos	Course Outcomes	Level of Learning domain (Based on Revised Bloom's)
C01	Explain the origin, purpose, and structure of containerisation and its link to global trade.	K2
C02	Plan the forms, advantages, and challenges of multimodal intermodal transport systems.	K3
C03	Select the operational elements like shipping lines, transport terms, freight stations, and SEZs.	K3
C04	Examine the container handling equipment, repair needs, inspection protocols, and leasing options.	K4
C05	Identify legal regimes, insurance processes, and fraud risks in containerised transportation.	K3

6. Correlation Of CO's With PO's

CO Nos.	P01	P02	P03	P04	P05	P06	P07
C01	H			H			H
C02	H	H		H		M	H
C03	H	H	L	H	H		H
C04	H	H			H	M	H
C05	H	H		H	H		H

H- High; M-Medium; L-Low

7. Course Contents

Unit I: Fundamentals of Containerisation

L-9

Containerisation and container shipping – origin – unit load – multimodal transport – selection of containers – freight structure and shipping regulations – freighting of containerised cargo – INCOTERMS – modes of container shipments – ICDs role and functions – CONCOR and central warehousing – EXIM procedures at ICD (Types of containers, IICL standard, CSC Plate Details)

Unit II: Multimodal Transport and cargo

L-9

Multimodal trade routes and their evolution – Types of transportation (road, rail, sea, air, pipeline, multimodal)-Nature of intermodalism– forms of intermodalism– Reasons shippers favor multimodalism – Factors in the development of multimodal transport – challenges – LCL-consolidation requirements-cargo stuffing – Container Stuffing Planning, Reefer Container Operations, OOG Cargo Handling

Unit III: Physical Operations in Multimodal Transport

L-9

Liner services, tramp shipping, and specialized vessels – Transport terms and practices – Road transport vehicles, weight, and measurement considerations – Rail transport vehicles and equipment – Air transport operations – Ports and their functions – LCL (Less-than-Container Load) and FCL (Full Container Load) – selection of shipping line- NVOCC (Non-Vessel Operating Common Carrier) – Freight forwarders and consolidators –CFS (Container Freight Station) – Free Trade Areas and Special Economic Zones (SEZ) (ICD and Its functions, Container Survey Process)

Unit IV: Container handling system

L-9

Container handling systems and equipment – trailer, straddle, gantry, mixed – inland transport equipment – container repairs – need for inspection – types of damages – types of wears -Leasing containers -- agents for general insurance Empty Depot operations, M&R (Maintenance & Repair) , IICL & CIC Standards

UNIT V: Insurance and legal regimes

L-9

Insurance facilities – claim adjustments procedure – international insurance of containers – types of claims handled through transport clubs – carriage of goods by sea act 1925 – carrier liability – Hague - Visby rules – observations on BL and other documents issued by international operators – marine frauds – types of frauds – container crimes.

TOTAL: 45 HOURS

8. Text Book

1. Hariharan, K. V. (2002). *A Text Book on Container and Multimodal Transport Management*. Shroff Publishers & Distributors.

9. Reference Books

1. Hammad, S., & Ksouri, M. (2014). *A Textbook on Container & Multimodal Transport Management*. Wiley-ISTE.
2. Branch, A. E., & Robarts, M. (2014). *Branch's Elements of Shipping* (9th ed.). Routledge.

Course Code	Course Name	L	T	P	C
2432MG1626	PORT AND TERMINAL MANAGEMENT	3	0	0	3

1. Preamble

The course on Port Management and Operations provides a comprehensive understanding of the key components that constitute the functioning of modern ports. It emphasizes the strategic role of ports in global trade and logistics, the operational intricacies of cargo handling, and the economic and regulatory frameworks that govern port activities.

2. Prerequisite

Basic knowledge of logistics and supply chain management is recommended.

3. Links To Other Courses

International Trade and Documentation, Transportation Management, Logistics and supply chain management.

4. Course Educational Objectives

Through this course the students will be able: -

1. To provide students with foundational knowledge of the structure, classification, and functions of ports within the global maritime transport system.
2. To develop the ability to analyze and apply port management principles, including governance models, cargo handling operations, port economics, and administrative functions.
3. To enable students to evaluate modern challenges and advancements in port operations with emphasis on sustainability, digitalization, and future trends.

5. Course Outcomes

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

Cos	Course Outcomes	Level of Learning domain (Based on Revised Bloom's)
CO1	Explain the types and roles of ports in global trade and supply chains.	K2
CO2	Select the port ownership, governance, and regulatory frameworks.	K3
CO3	Apply knowledge of port infrastructure and cargo handling operations.	K3
CO4	Plan port costs, revenues, and performance indicators using financial and operational data.	K3
CO5	Assess the integration of sustainability and technology in modern port operations.	K4

6. Correlation Of CO's with PO's

CO Nos.	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	H			H			H
CO2	H	H		H			H
CO3	H	H	L		M		H
CO4	H	H		H			H
CO5	H	H		H	M	L	H

H- High, M-Medium, L-Low

7. Course Contents

Unit i: Introduction to Ports and Their Functions

L-9

Definition and classification of ports – Commercial, industrial, transshipment, hub and feeder ports – Role of ports in international trade and global logistics – Evolution and historical development of port systems – Structure of the maritime transport industry – Types of cargo: containerized, bulk, break-bulk, liquid, and Ro-Ro – Introduction to key stakeholders: port authorities, terminal operators, shipping lines – Overview of port facilities and services – Port approaches, navigation channels, berthing systems, and anchorage – Empty Depot operators, M&R (Maintenance & Repair), IICL & CIC Standards

Unit II: Port Governance, Ownership and Administration

L-9

Types of port ownership models: public, private, landlord – Port governance structures and management frameworks – Role and responsibilities of port authorities – Legal and regulatory framework governing port operations – International maritime conventions and security codes – Port reform and privatization – Public-Private Partnerships (PPP) in port development – Strategic port planning and institutional arrangements – Port competition and positioning in global networks – Regional and global port administration models.

Unit III: Port Operations and Cargo Handling

L-9

Port infrastructure and layout – Terminals, berths, yards, warehouses – Planning and design of port facilities – Vessel-related operations: pilotage, towage, mooring, berthing – Cargo handling systems and technologies – Terminal operations for different cargo types – Use of port equipment: cranes, forklifts, conveyors, AGVs – Turnaround time and berth productivity – Port labor and workforce management – Occupational safety and training in cargo handling – Port logistics and operational efficiency..

Unit IV: Port Economics, Finance and Performance Measurement

L-9

Basic concepts of port economics – Cost elements in port operations – Sources of revenue: port dues, terminal charges, handling fees – Port pricing strategies and tariff systems – Economic significance of ports to trade and regional development – Budgeting and financial planning in port administration – Investment evaluation and capital budgeting for port projects – Key performance indicators (KPI) for port efficiency – Port productivity metrics – Benchmarking and performance comparison among ports..

Unit V: Sustainability, Technology and Future Trends in Port Management

L-9

Environmental issues in port operations – Air and water pollution, waste management, and dredging – Green port initiatives and sustainable development – Use of digital technology: automation, IoT, AI in port operations – Port Community Systems (PCS) and integrated logistics platforms – Smart ports and digital transformation – Risk management and port security – Climate change adaptation and disaster resilience – Offshore port development and energy terminals – Future trends in global port operations and port-city integration Port Security Systems, Safety Management Practices.

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TOTAL: 45 HOURS

8. Text Books

1. Patrick M. Alderton, *"Port Management and Operations"*, Informa Law Category from Routledge, 3rd Edition, 2020.
2. Maria G. Burns, *"Port Management and Operations"*, 1st Edition, CRC Press, 2015.
3. Alan E. Branch, *"Elements of Port Operation and Management"*, Springer, 2011.

9. Reference Books

1. Bo Lu, Shouyoung Wang, *"Container Port Production and Management"*, Springer, 2017
2. Theo Notteboon, Athanasios Pallis and Jean-Paul Rodrigue, *"Port Economies,*

Management and Policy”, 1st Edition, Routledge,2022.

Course Code	Course Name	L	T	P	C
2432MG1627	MARITIME LAW AND INSURANCE	3	0	0	3

1. Preamble

This course introduces the fundamental legal principles governing international maritime operations. It encompasses international conventions, maritime torts, marine pollution control, shipping contracts, marine insurance, and laws related to carriage by land, sea, and air.

2. Prerequisite

For an optimum grasp from this course, students will need to revive basic knowledge of maritime laws.

3. Links To Other Courses

This course is closely linked to master's degree programs related to logistics, shipping, international trade, and maritime law.

4. Course Educational Objectives

Through this course the students will be able

1. To provide students with a foundational understanding of maritime law and its significance in international trade and shipping.
2. To equip students with knowledge of marine insurance principles, policies, and claims processing.
3. To examine the legal mechanisms for resolving disputes within the maritime industry and how international conventions shape maritime law and insurance practices.

5. Course Outcomes

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

Cos	Course Outcomes	Level of Learning domain (Based on Revised Bloom's)
CO1	Explain key concepts of maritime law and marine insurance, covering their history, principles, and scope.	K2
CO2	Identify essential elements, types, clauses, and differences between common law and statutory regimes in marine insurance contracts.	K3
CO3	Apply marine insurance principles in practice, including risk coverage, claims, and settlements for various losses and liabilities.	K3
CO4	Examine international maritime conventions and regulations, and their impact on maritime liability and insurance.	K4
CO5	Analyze dispute resolution mechanisms and legal remedies in maritime law and marine insurance, including arbitration and contract breaches.	K4

6. Correlation Of CO's with PO's

CO Nos.	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	H	H		H			H
CO2	H	H		H			H
CO3	H	H	H	H	H	L	H
CO4	H	H	H	H	H	L	H
CO5	H	H	H	H	H		H

H- High, M-Medium, L-Low

7. Course Contents

Unit I: Introduction to Maritime Law and Insurance.

L-9

Definition and scope of Maritime Law – Significance of Maritime Law – Historical development – Role of international conventions – Definition and scope of Marine Insurance – Key principles of Marine Insurance – Relationship between Maritime Law and Marine Insurance – Impact of international conventions on both fields – Indian Laws (MTO Act).

Unit II: Marine Insurance Contracts.

L-9

Formation of Marine Insurance Contracts – Essential elements of a contract – Types of Marine Insurance Policies – Protection and Indemnity (P&I) Insurance – Key clauses in contracts – General Average – Constructive Total Loss – Common Law vs. Statutory regimes – Key case laws in Marine Insurance - Charter Party Basics, Bill of Lading Legal Importance, LOI (Letter of Indemnity)

Unit III: Key Principles of Marine Insurance.

L-9

Insurance of Marine Risks – Types of risks: Perils of the sea, War risks, Piracy – Coverage for cargo, hull, freight, liability – Legal principles: Utmost Good Faith, Insurable Interest, Proximate Cause – Liability and Loss Conditions – Types of claims: Total Loss, Partial Loss, Collision Liability – Legal process of claim settlement.

Unit IV: Maritime Liability and International Conventions.

L-9

Shipowner's Liability – Liability for Cargo Loss or Damage – Carrier's Liability – Pollution Liability- Key International Conventions: SOLAS (Safety of Life at Sea) – MARPOL (Marine Pollution) – Hague-Visby Rules – LLMC (Limitation of Liability for Maritime Claims). Emerging International Standards: Role of Port State Control – Flag State Control – Legal Impact of International Maritime Conventions on Marine Insurance.

Unit V: Dispute Resolution and Legal Remedies in Maritime Law and Insurance

L-9

Dispute resolution mechanisms – Maritime Arbitration – Role of LMAA – Court jurisdiction – Enforcement of arbitration awards – Remedies for breach of contract – Defenses in Marine Insurance – Exclusion clauses – Negligence in Maritime Operations – Compensation for injury, pollution, cargo damage – Insurance implications.

TOTAL: 45 HOURS

8. Text Books

1. F.D. Rose, *"Marine Insurance :Law and Practice"*, Informa, 2nd Edition, 2015.
2. Ozlem Gurses, *"Marine Insurance Law"*, Routledge, First Edition, 2015.
3. Yvonne Baatz, *"Maritime Law"*, Informa Law from Routledge, Fifth Edition 2021.
4. Simon Baughen, *"Shipping Law"*, Routledge, 2018.

9. Reference Books

1. Samareshwar Mahanty, *"Maritime Jurisdiction and Admiralty Law in India"*, Universal Law Publishing, 2nd Edition, 2017.
2. Simon Baughen, *"Shipping Law"*, Routledge, 2018.
3. Shukla M. C., *"Mercantile Law"*, Sultan Chand & Co., New Delhi, 2011.

Course Code	Course Name	L	T	P	C
2432MG1628	AIR CARGO MANAGEMENT	3	0	0	3

1. Preamble

This course provides a foundational and practical understanding of air cargo operations in the global logistics industry. It emphasizes the handling, documentation, freight calculation, regulatory frameworks, and unique aspects such as dangerous goods transportation and international cargo hubs. Students will gain insight into key air freight practices including airway bills, air cargo handling agencies, and cargo village operations.

2. Prerequisite

Basic knowledge of logistics and supply chain operations, international trade, and modes of transportation.

3. Links To Other Courses

Logistics Management, International Trade Documentation, Multimodal Transport, Freight Forwarding, Warehouse and Distribution Management.

4. Course Educational Objectives

Through this course the students will be able: -

1. To Understand the global air cargo industry structure, operations, and its integration within logistics and supply chains.
2. To Apply regulatory, operational, and economic concepts in managing air cargo services efficiently and in compliance with international standards.
3. To Analyze and Evaluate real-world air cargo scenarios using industry tools and case studies, and propose innovative strategies for improvement.

5. Course Outcomes

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

Cos	Course Outcomes	Level of Learning domain (Based on Revised Bloom's)
C01	Explain the structure, key stakeholders, and functional operations of the air cargo industry.	K2
C02	Apply air cargo handling concepts, aircraft configurations, and documentation to perform freight calculations effectively.	K3
C03	Select air cargo documentation and apply international regulations for customs, security, and handling of dangerous goods.	K3
C04	Examine the pricing, cost structures, and revenue management practices used in air cargo services.	K4
C05	Plan and Demonstrate the Technology, Innovation, And Future Trends In Air Cargo	K3

6. Correlation Of CO's with PO's

CO Nos.	PO1	PO2	PO3	PO4	PO5	PO6	PO7
C01	H			H			H
C02	H	H		H	H		H
C03	H	H	H	H	H		H
C04	H	H	H	H	H	M	H
C05	H	H	H	H	H	M	H

H- High, M-Medium, L-Low

7. Course Contents

UNIT I: Air Ports and Shipment

L-9

Historical development of air cargo industry- Role of air cargo in just-in-time (JIT) logistics- Stakeholders in the air cargo ecosystem-Types of air cargo- Ground Handling Agencies - Air Craft - Advantage of Air shipment - Economics of Air Shipment - Sensitive Cargo by Air shipment - Do's and Don'ts in Air Cargo Business (Air Freight Forwarding Process , Courier vs Air Freight , Express Cargo Operations)

UNIT II: Air Cargo

L-9

Air Cargo Console - Freightage of Air Cargo - Cargo aircraft types-Aircraft configuration and ULD (Unit Load Devices) standards- Air cargo terminal layout, design, and automation-Special cargo handling procedures-Cargo route planning and scheduling strategies Volume based Calculation of Freight - Weight based Calculation of Freight - Import Documentation - Export Documentation - Dangerous Goods Declaration

UNIT III: Documentation, Legal Frameworks and Regulatory Compliance

L-9

Standard cargo documents: MAWB, HAWB, manifest, invoice, packing list, EDI-AWB formats and functions (IATA vs. non-IATA)-Incoterms and cargo responsibility points (EXW, FOB, CIF, DDP, etc.)-Customs clearance and bonded cargo-Global regulatory bodies: IATA, ICAO, TSA, WCO-Legal conventions: Warsaw Convention, Montreal Convention 1999-Security programs: Known Consignor/Known Shipper, cargo screening-Handling of restricted and dangerous goods (IATA DGR guidelines) – Authority.

UNIT IV: Air Cargo Economics, Revenue and Marketing Strategies

L-9

Principles of air cargo pricing: weight-based, volume-based, density ratio-Chargeable weight concept and freight charge calculation-Yield management and capacity utilization strategies-Cost structures: fuel, handling, security, airport fees-Cargo marketing: service differentiation, customer relationship management-Distribution channels: direct vs. indirect-Performance metrics: load factor, yield per ton-km, revenue tonne - kilometres (RTK)-Revenue forecasting and cargo space optimization - (Drone Cargo Operations , E-Commerce Air Cargo, AI in Air Cargo ,Digital Airway Bill)

UNIT V: Technology, Innovation and Future Trends in Air Cargo

L-9

Digital transformation: e-AWB, Cargo iQ, digital twins- IT systems: Cargo Management Systems (CMS), Enterprise Resource Planning (ERP)- Real-time cargo tracking and tracing technologies (RFID, GPS, IoT)- Artificial intelligence and data analytics in route and space optimization- Disruption management- DG Cargo by Air - Classification and labelling - Types of Labels according Cargo – Samples of Labels - Packing and Transportation of DG Goods by Air

TOTAL: 45 HOURS

8. Text Books

1. Yoon SeokChang,Air Cargo Management, Taylor & Francis, 2016.
2. Xie Chun Xun Zhu, Air Cargo Management Introduction - Aviation Logistics, Management Series (Chinese Edition), Southeast University Press, 2006.
3. Air Cargo Management.Air Freight and the Global Supply Chain, Routledge, Michael Sales, Sebastiaan Scholte,3rd Edition 2023

9. Reference Books

1. Paul, Air cargo distributions: a management analysis of its economic and marketing benefits, Jackson and William Brackenridge (Gower Press), 1988.
2. Peter S. Smith, Air freight: operations, marketing and economics, Chu (Boston : Kluwer Academic Publishers), 2004.
3. John Walter wood, Airports; some elements of designs and future development,

Chu(Boston : Kluwer Academic Publishers), 1981.

Course Code	Course Name	L	T	P	C
2432MG1629	DISTRIBUTION AND WAREHOUSE MANAGEMENT	3	0	0	3

1. Preamble

This course provides an in-depth understanding of distribution and warehouse management within the context of supply chain operations. It covers the strategic, operational, and technological aspects of warehousing and distribution systems, focusing on design, efficiency, integration with technology, and sustainability.

2. Prerequisite

The students can have the basic fundamentals of supply chain management and inventory concepts.

3. Links To Other Courses

This course has links to courses like Logistics and Supply Chain Management, Port and Operations Management etc.

4. Course Educational Objectives

Through this course the students will be able: -

1. To understand how to effectively manage distribution and warehouse operations and explore warehouse design, layout optimization, and storage systems for efficient distribution.
2. To learn to apply modern tools and systems for optimizing logistics and warehouse performance.
3. To examine how to lead with integrity, embrace sustainability, and commit to continuous improvement in distribution and warehouse management.

5. Course Outcomes (C0)

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

Cos	Course Outcomes	Level of Learning domain (Based on Revised Bloom's)
C01	Explain the principles, functions, and strategic importance of distribution and warehouse systems	K2
C02	Develop optimized warehouse layouts and select suitable storage systems and infrastructure	K3
C03	Apply inventory management techniques to improve distribution efficiency	K3
C04	Select appropriate Technology Integration in Distribution and Warehousing	K3
C05	Examine the Operational Strategies and Performance in Distribution	K4

6. Correlation Of CO's with PO's

CO Nos.	P01	P02	P03	P04	P05	P06	P07
C01	H		H	H	H	H	
C02	H		H	H	H		
C03	H	H		H		H	
C04	H	H			H	H	M
C05	H	H	H	H	H	H	M

H- High, M-Medium, L-Low

7. Course Contents

Unit I: Fundamentals of Distribution and Warehouse Management

L-9

Introduction to Distribution – Warehouse Management – Types of warehouse operation – Reasons for holding stock - Warehouse location- Number of warehouses - Supply chain trends affecting warehouses - Specialized warehousing- Warehouse processes - Role of the warehouse manager - Importance and Role of Distribution – Functions and Objectives of Distribution and Warehousing – Distribution Network Design and Its Impact on Overall Supply Chain Efficiency.

Unit II: Warehouse Design, Layout, and Infrastructure

L-9

Principles of Warehouse Design – Layout Optimization – Warehouse Storage Systems and Equipment – Cross-Docking and Its Benefits in Distribution.

Unit III: Inventory Management for Distribution Efficiency

L-9

ABC Analysis and Classification – Economic Order Quantity (EOQ) and Reorder Point Calculations – Safety Stock Management – Demand Forecasting - Materials Management.

Unit IV: Technology Integration in Distribution and Warehousing

L-9

Introduction – Need for WMS in a company - Choosing a WMS - The process - Selecting the right - What to look for in a system - Selecting a partner - Before the final decision - Implementation - Software as a service - Cloud computing – RFID Technology and Real-Time Tracking – Integration of Internet of Things (IoT) in Distribution Processes - Outsourced Warehouse Management, SLA of Warehouse Management and SAP of Warehouse Management - Robotics in Warehousing, Cloud-Based Warehouse Platforms, SaaS WMS Solutions, and Integrated Logistics Dashboards.

Unit V: Operational Strategies and Performance in Distribution

L-9

Order Processing, Picking Strategies and Packing Methods – Key Performance Indicators (KPIs) for Distribution and Warehouse Management – Continuous Improvement and Lean Principles in Distribution – Challenges and Future Trends – Sustainability in Distribution and Warehouse Operations – Omni-Channel Distribution and E-Commerce Implications – Reverse Logistics and Handling Returns.

TOTAL: 45 HOURS

8. Text Books

1. Gwynne Richards, *“Warehouse Management: The Definitive Guide to Improving Efficiency and Minimizing Costs in the Modern Warehouse”*, 4th Edition, Kogan Page, 2021.
2. Philip M. Price, Natalie J. Harrison, *“Warehouse Management and Inventory Control”*, 2nd Edition, Access Education, 2015.
3. Michael Hompel, Thorsten Schmidt, *“Warehouse Management”* Springer Berlin Heidelberg, 2014

9. Reference Books

1. James A. Thompkins; Jerry D. Smith, (1998), *“The Warehouse Management”*, 2nd Edition, Thompkins Publishers, USA.
2. Liu, H., Mulder, R., & Kobussen, M., (2014). *Warehouse and distribution centre*. Design Media Publishing (UK) Limited.

PROGRAMME ELECTIVE

SEMESER III

TECHNOPRENEURSHIP

Sl. No.	Course Code	Course Name	L	T	P	C
1	2432MG1630	Business Plan and Ethics	3	0	0	3
2	2432MG1631	IPR Management	3	0	0	3
3	2432MG1632	Digital Innovations	3	0	0	3
4	2432MG1633	International Strategic Management and Government Policy	3	0	0	3
5	2432MG1634	Technology and Global Business Linkage Opportunities	3	0	0	3
6	2432MG1635	Global Start-up Exchange Incubation Program	3	0	0	3

Course Code	Course Title	L	T	P	C
2432MG1630	BUSINESS PLAN AND ETHICS	3	0	0	3

1. Preamble

This course introduces Business plan and Business ethics as the modern managerial approach to ethical questions in business environment. It gives not only understand of main theoretical concepts, but also developing skills of identification, analysis and permission of ethical dilemmas on a workplace and managing ethics in organizations.

2. Prerequisite

The course is based on the knowledge and competences provided by the following disciplines: General management and Economic analysis of a firm.

3. Links to Other Courses

Business strategy

4. Course Educational Objectives

Through this course the students will be able: -

1. To understand the key components of a successful venture.
2. To get clear knowledge about the source of Business plan.
3. To be familiarize with business plan components.
4. To know the business ethics and dimension of social responsibility.
5. To get in-depth knowledge about ethical decision-making process.

5. Course Outcomes

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

Cos	Course Outcomes	Level of Learning domain (Based on Revised Bloom's)
CO1	Summarize the factors for successful Business Plan	K2
CO2	Identify the suitable Business Plan Sources	K3
CO3	Choose the Viable Business Plan Components	K3
CO4	Examine the Theories and ethical issues in the business.	K4
CO5	Make use of ethical decision making in their business.	K3

6. Correlation of CO's with PO's

CO Nos.	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	H					H	
CO2		H					
CO3	H				H	H	
CO4	M			H			M
CO5			M				M

H- High; M-Medium; L-Low

7. Course Contents

Unit I: Business and Business Parameters

L-9

Business Plan - meaning- reason for preparing business plan, Structure and Topics of a Business Plan - management and organizational plan-the common considerations - factors of successful business -capital management- financial control - evaluation, revision, and update.

Unit II: Business Plan Sources

L-9

Business plan process - sources of information - Internet, government sources and statistics - offline research resources - library - SBDC'S -Trade and industries associations - sources of market research - evaluating data- benefits of market study -coverage of market study - information sources.

Unit III: Business Plan Components

L-9

The Executive summary - company description - Industry analysis and trends - Target market - Competition - strategic position and risk assessment - Marketing plan and sales strategy - operations - Technology plan -management and organization.

Unit IV: Business Ethics

L-9

Definition and importance-The Theory of values of business ethics- Emerging ethical issues in business- Ethical Leadership- Ethics as a dimension of social responsibility- Corporate Governance- Global Practices

Unit V: The Ethical Decision-Making Process

L-9

Basics in Mind Management -Individual factors, organizational factors- Nash's Twelve Point Prescription - Frameworks for Ethical Thinking - Decision-Making Models - Normative Frameworks - Ethical Decision-making.

TOTAL: 45 HOURS

8. Text Book

1. Modh, Satish, Ethical Management: Text and Cases in Business Ethics and Corporate Governance. 2nd edition, Macmillan Publishers India Ltd, 2014.
2. Master Steve, "Smart Business Plan", Silk Road Publishing (Toronto, Canada),2022

9. Reference Books

1. Mathur, U.C., Corporate Governance and Business Ethics: Text and Cases, Macmillan Publishers India Ltd, New Delhi, 2005.
2. Farooq, M., "Business Plan template: Answer the questions, complete your Business Plan", Linkowing University Press.,2019.
3. Hisrich, Peters, & Shepherd, "Entrepreneurship",10th Edition, Boston, MA: Irwin, McGraw Hill,2017.
4. Spinelli, & Adams., "New Venture Creation: Entrepreneurship for the 21st Century", 10th Edition, Boston, MA: Irwin McGraw-Hill, 2017.
5. Timmons, Zacharakis, & Spinelli, "Business Plans that Work: A Guide for SmallBusiness", New York, NY: McGraw-Hill,2018.

Course Code	Course Title	L	T	P	C
2432MG1631	IPR MANAGEMENT	3	0	0	3

1. Preamble

This course presents a thorough and systematic coverage of IPR Management for entrepreneurs. Technological developments like internet, digital databases, social networking, and digital rights management have immense effect on the core of copyrights and other IPR Issues. A balance between intellectual property rights and knowledge management is essential for prolong growth and control of information explosion.

2. Prerequisite

Basic knowledge of finance and management.

3. Links to Other Courses

Innovation and Start-up Management

4. Course Educational Objectives

Through this course the students will be able: -

1. Understand fundamental aspects of Intellectual Property Rights.
2. Disseminate knowledge on Copy right, Trademarks and patents.
3. Relate that IPR protection provides an incentive to inventors for further researchwork and investment in R & D, which leads to creation of new and better products.
4. Aware about current trends in IPR and Govt. steps in fostering IPR.
5. Study about international IP regime.

5. Course Outcomes

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

Cos	Course Outcomes	Level of Learning domain (Based on Revised Bloom's)
C01	Outline the Intellectual property Rights and its implications in developing countries	K2
C02	Utilize the theories of Intellectual property Rights	K3
C03	Examine the law of copyright, patents and trademarks.	K4
C04	Identify the Contemporary Issues in IPR	K3
C05	Interpret the Global IP Regime	K2

6. Correlation of CO's with PO's

CO Nos.	P01	P02	P03	P04	P05	P06	P07
C01	H						M
C02		H		H	M	H	
C03	M						
C04		H				H	M
C05			M				

H- High; M-Medium; L-Low

7. Course Contents

Unit I: Intellectual Property Rights

L-9

Nature and Characteristics of Intellectual Property -Origin and Development of Intellectual Property – categories of Intellectual Property-IPR in India -Strategies and Challenges- IPR Implications for Developing Countries- Analysis of Intellectual Property Rights Using Emerging Technologies in the Digital Age.

Unit II: Theories of Intellectual Property

L-9

Rationale for Protecting Intellectual Property- Balancing the Protection of IPR and Public Policy - IPR Awareness in the Industry & MSME- Training Program for Enforcement Agencies- Theories of IPR- International Institutions and basic International Conventions.

Unit III: Law of Copyright, Patents and Trademark

L-9

Classes of Copyrights - Criteria for Copyright- Copyrights and Internet -Non-Copyright Work - Judicial Powers of the Registrar of Copyrights - Copyright Symbol - Validity of Copyright - International Copyright Agreements, Conventions and Treaties - Patents- Patentability and Procedures for Grant of Patents- Patent Authorities- Patent and Human Right Issues- Patent Agents & Emerging Issues- Registration of Trademarks.

Unit IV: Contemporary Issues in IPR

L-9

IP Organizations in India -Industrial Designs -The Impact of Internet on IPR - E-Commerce and IPR issues - Design: concept of novel and original - Procedure for registration, effect of registration and term of protection Geographical Indication (GI) Geographical indication: Difference between GI and trademarks - Procedure for registration, effect of registration and term of protection.

Unit V: International IP Regime

L-9

World Intellectual Property Organisation (WIPO) – Functions of WIPO – Membership – GATT Agreement – Major Conventions on IP – Berne Convention – Paris Convention – TRIPS agreement.

Total: 45 HOURS

8. Text Book

1. Rupinder Tewari and Mamta Bhardwaj,” Intellectual Property Rights - A Primer for Academia, Tata-McGraw Hill, New Delhi, 2021

9. Reference Books

1. Narayanan P., Copyright and Industrial Designs, Third Edition, Eastern LawHouse, New Delhi, 2007.
2. Steven D Anderman, Interface Between Intellectual Property Rights and Competition Policy, Cambridge University Press, 2007.
3. Ahuja V.K., Law relating to Intellectual Property rights, 2 nd Edition, LexisNexis,2013.
4. Paul Goldstein, International Copyright: Principles, Law, and Practice, Oxford University Press, 2012.

Course Code	Course Title	L	T	P	C
2432MG1632	DIGITAL INNOVATIONS	3	0	0	3

1. Preamble

Formulation of this course is to familiarize with concepts such as E mail Marketing, Digital Display and Social-media such as Face book, Twitter and LinkedIn.

2. Prerequisite

For an optimum grasp from this course, candidates can have a basic knowledge of commerce. E

3. Links to Other Courses

Innovation and Startup Management

4. Course Educational Objectives

Through this course the students will be able: -

1. Understand the relevance of different types of digital platforms and digital media.
2. Understand the knowledge on content marketing.
3. Know the Programmatic advertising and Video content strategy.
4. Create the knowledge of gamification and its impact on digital marketing.
5. Familiarize with methodologies, tools and technologies involved in digital market.

5. Course Outcomes

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

Cos	Course Outcomes	Level of Learning domain (Based on Revised Bloom's)
C01	Compare the traditional marketing and digital marketing	K2
C02	Select the Online Market Place for digital marketing business	K3
C03	Examine the technological factors for Online Macro Environment	K4
C04	Identify the components of Marketing Mix through digital Media	K3
C05	Choose the Reliable tools and techniques in digital marketing.	K3

6. Correlation of CO's with PO's

CO Nos.	P01	P02	P03	P04	P05	P06	P07
C01	M						
C02		H	M				
C03			L		L		
C04	H						
C05	H						

H- High; M-Medium; L-Low

7. Course Contents

Unit I: Introduction to Digital Marketing

L-9

Transformed marketing- multichannel marketing-types of online media-digital marketing platform-key features of digital marketing strategy-strategic framework for developing digital marketing-application of digital marketing-5S's of Internet marketing-difference between e-commerce and e-business.

Unit II: Online Market Place Analysis

L-9

Situational analysis for digital marketing-digital marketing environment-consumer choice and digital influence-online consumer behaviour and implementation for marketing-new channel structure-business model for e-commerce.

Unit III: Online Macro Environment

L-9

Technological factors-URL strategy-infrastructure component of the Internet-web page standard-graphical images-animated graphical information's, audio and video standards,mobile apps, WIFI, blue tooth wireless application-emerging techniques-assessing the market value technology-economic forces-political forces-legal forces.

Unit IV: Digital Media and Technology on the Marketing Mix

L-9

Product: Option for varying the core product-offering digital products-changing the external products-velocity of new product development-diffusion, price: price transparency, alternative pricing structure, new channel structure, channel conflict, place-promotion.

Unit V: Digital Marketing Implementation and Practice

L-9

Delivery - the online customer experience-campaign-planning for digital media-marketing communications using digital media channels, evaluation and improvement of digital channel performance-business -to -consumer-digital marketing practice, business -to- business digital marketing practice.

TOTAL: 45 HOURS

8. Text Book

1. Dave Chaffey, Fiona Ellis-Chadwick, Digital Marketing Strategy, Implementation and practice 6th edition, Pearson, 2016.
2. Puneet Singh Bhatia; "Fundamentals of Digital Marketing", Pearson Education; First edition, 2019.

9. Reference Books

1. Kaufman, Ira, and Chris Horton. "Digital Marketing: Integrating Strategy and Tactics with Values", New York, Routledge, 2014.
2. Bell, David R., "Location is (Still) Everything: The Surprising Influence of the Real World on How We Search, Shop and Sell in the Virtual One", New Harvest, 2014.
3. Vandana Ahuja, "Digital Marketing", Oxford University Press, 2015.
4. Stokes, "Rob and the Minds of the Quirk, eMarketing: The essential guide to Marketing in a digital world", Quirk Education Ltd., 5th Edition, 2013.
5. Oliver Busch, "Programmatic Advertising: The Successful Transformation to Automated Data-Driven Marketing in Real-Time", Springer, 2016.

Course Code	Course Title	L	T	P	C
2432MG1633	INTERNATIONAL STRATEGIC MANAGEMENT AND GOVERNMENT POLICY	3	0	0	3

1. Preamble

The process of internationalization together with continuous technology improvements, especially in the last three decades, has brought unprecedented flows of goods, services, labour and capital across national boundaries. World trade has become increasingly important, foreign direct investment is growing, and the competitive pressures on many industries and firms have intensified.

2. Prerequisite

Basic understanding about International Business policy.

3. Links to Other Courses

Innovation and Startup Management

4. Course Educational Objectives

Through this course the students will be able: -

1. To understand the core concepts and models underlying contemporary international strategic management
2. To know their practical application to real issues facing real world companies.
3. To demonstrate a critical understanding of the complex nature of the international business environment
4. To familiarize students to corporate, functional strategies and government policies.
5. To understand about foreign trade policy.

5. Course Outcomes

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

Cos	Course Outcomes	Level of Learning domain (Based on Revised Bloom's)
CO1	Outline the core concept of Globalization Context	K2
CO2	Develop Global Level Entry Strategies	K3
CO3	Identify the Current and future trend in Globalization	K3
CO4	Summarize the Foreign Trade and its Policy	K2
CO5	Examine the Social Responsibility of the Global Firms	K4

6. Correlation of CO's with PO's

Cos	P01	P02	P03	P04	P05	P06	P07
CO1	H						
CO2	M			H		H	
CO3	H						
CO4	H		H				
CO5	M	H	M	H			

H- High; M-Medium; L-Low

7. Course Contents

Unit I: Global Contexts

L-9

Core concepts-critical role of a firm-Globalization of markets and Competition, The Emerging Global Environment, Globalization, Societies and Cultures, Globalization, - The Global Integration/Local Responsiveness Grid.

Unit II: Global Strategies

L-9

Designing a global Strategy- The global functional model-Assessing Countries' Attractiveness; Entry Strategies; Global Strategic Alliances; Global Mergers and Acquisitions- Entry strategies.

Unit III: Managing Globally

L-9

Global Marketing; Global Operations and Digital Networks; Global Innovation; Global Financial Management; Global Human Resource Management; Designing a Global Organization, Current and Future Trends in Globalization.

Unit IV: Foreign Trade and Policy

L-9

Hedging against currency fluctuations- Project finance-India's Foreign trade and Policy Direction and composition of India's Foreign Trade. Export – Import Policy, Export Promotion and Institutional set up. Deemed exports, Rupee convertibility.

Unit V: The Social Responsibility of the Global Firm

L-9

Global companies and corruption-The practice of corruption and the role of global companies- Global companies and environmental protection -Global corporations and labour practices- Global companies and human rights - Social responsibility and global firms: an on-going challenge.

TOTAL: 45 HOURS

8. Text Book

1. Philippe Lasserre, Global Strategic Management, Oxford: Macmillan Education:Palgrave 2018,4th edition

9. Reference Books

1. Charles E. Hill, "International Business: Competing in the Global Marketplace", Tata McGraw Hill, 10th Edition, 2015.
2. Charles Hill, Arun Kumar Jain, "International Business: Competing in the Global Marketplace", Tata McGraw Hill, 6th Edition, 2008.
3. Ghanshyam Sharma, "International Trade Theory and Practice, Centrum Press, 2010.
4. Francis Cherunilam. "International Business", PHI, 2019.
- Joshi, Rakesh Mohan, "International Business", Oxford University Press, 2009.

Course Code	Course Title	L	T	P	C
2432MG1634	TECHNOLOGY AND GLOBAL BUSINESS LINKAGE OPPORTUNITIES	3	0	0	3

1. Preamble

This course presents a thorough and systematic coverage of technologies in entrepreneurship and the global business opportunities available for entrepreneurs

2. Prerequisite

Basic knowledge of technology.

3. Links to Other Courses

Innovation and Start-up Management

4. Course Educational Objectives

Through this course the students will be able: -

1. To develop an understanding innovation and technology in entrepreneurship.
2. To know the practices of MSME.
3. To know about new product and services.
4. To understand the global business opportunities for entrepreneurs.
5. To enable and apply current business practices to the management of International Business

5. Course Outcomes

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

Cos	Course Outcomes	Level of Learning domain (Based on Revised Bloom's)
C01	Infer the basic knowledge of technology and innovation in the global market	K2
C02	Examine the recent technological advancement startup development on a global scale	K4
C03	Identify the sustainable product and service markets globally	K3
C04	Interpret the opportunities and challenges on India's foreign trade	K2
C05	Select the appropriate Global Strategic Alliance	K3

6. Correlation of CO's with PO's

CO Nos.	P01	P02	P03	P04	P05	P06	P07
C01	H						
C02	H			H			
C03							M
C04				H			M
C05		H	M				

H- High; M-Medium; L-Low

7. Course Contents

Unit I: Technology and Emerging Market

L-9

Innovation objectives – Technology as Physical Infrastructure- Technology of Information Infrastructure- strategies and firm performance – Technology of Human Infrastructure- technology for rural market development – Technology Trends in International Business.

Unit II: Global Innovation and Technology Development

L-9

Innovation as a tool for Global Growth – Kinds of Innovation – Risks of Market – Creating Innovation – Investing in Innovation – from local to global innovation – Innovation as a Human Capital Endeavour – Driving a Culture of Innovation – Innovations Imperative – Protecting Intellectual Property – Trade Secrets – The Difficulty of Enforcement.

Unit III: Analytical Tools for International Business and Sustainability

L-9

Technology of Information Infrastructure -Communication Technologies -Speed of the Internet - Peer-to-Peer and the Shared Economy -Data Storage and Processing Technologies-Collaborating for Sustainability-Why Companies Want to Collaborate-How to Collaborate Successfully- Sustainability and Innovation.

Unit IV: Basics of Global Business and Opportunities

L-9

International financial system --exchange rate system – current exchange rate regimes – exchange control – FEMA Act – concepts of foreign exchange market – types of exchangerisks- concept and forms of FDI- organizational structure of international business.

Unit V: Global Strategic Alliance

L-9

Deciding which Foreign Markets to Enter- Entry Modes-Types – making strategic alliance successful – cross border mergers and acquisitions – motives of cross border mergers and acquisitions – Franchising-joint ventures abroad – global outsourcing- Multidomestic Strategy- Mega national Strategy-Transnational Strategy.

TOTAL: 45 HOURS

8. Text Book

1. Gupta CB, International business, S. Chand and Company Pvt. Ltd, 2014.
2. Shad Morris, James, International business, Wiley Publication., 2019.

9. Reference Books

1. Praveen Parboteeah K., John B. Cullen, "International Business Strategy and the Multinational Company, Taylor & Francis, 2009.
2. Khurana P.K., "Export Management", Galgotia Publication, New Delhi, 2010.
3. Leevanandam C., "Foreign Exchange: Practices, Concept and Control", Sultan Chand Publications, 2002.
4. Foreign Trade Policy, (2015 – 2020): Handbook of Export Procedure and Annual of the Ministry of Commerce, Government of India.

Course Code	Course Title	L	T	P	C
2432MG1635	GLOBAL START-UP EXCHANGE INCUBATION PROGRAM	3	0	0	3

1. Preamble

This course presents a thorough and systematic coverage of global start-up for entrepreneurs. Entrepreneurial ventures that disrupt the landscape in some way, creating platforms or executing on new models. This Unit familiarizes students with start-up opportunities and necessary funding options and Incubation facilities.

2. Prerequisite

Basic knowledge of Start-up ethics and Laws.

3. Links to Other Courses

Start-up

4. Course Educational Objectives

Through this course the students will be able: -

1. Understand the Startup opportunities
2. Know the necessary skills for managing their business enterprise.
3. Able to work with dynamic network of national social entrepreneurs and engagewith those who are pioneering innovations and establishing best practices
4. Understand the concept of design thinking to identify opportunity & create business model innovation and able to create a strategy for launch

5. Course Outcomes

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

Cos	Course Outcomes	Level of Learning domain (Based on Revised Bloom's)
CO1	Make use of the opportunities in Global Startup	K3
CO2	Explain the Fundamentals of various Business Incubations.	K2
CO3	Identify the structures of TBI in India.	K3
CO4	Summaries the various start-up policies in our country.	K2
CO5	Analyze the innovation dimensions in global business.	K4

6. Correlation of CO's with PO's

CO Nos.	P01	P02	P03	P04	P05	P06	P07
CO1	H						
CO2	H		M				
CO3				H			
CO4					H		M
CO5		H					

H- High; M-Medium; L-Low

7. Course Contents

Unit I: Global Startup Opportunities

L-9

Startup opportunities: The New Industrial Revolution –Business Startup – Ideation- Venture Choices – The Rise of the startup economy- The Entrepreneurial Ecosystem - Entrepreneurship in India. Government Initiatives. Financing Entrepreneurial Ventures Resources requirements, franchising, entrepreneurial finance, obtaining venture and growth capital.

Unit II: Business Incubation

L-9

Business Incubation Definition and Principles- Concepts, characteristics and importance, The Foundational Basis for Technology Business Incubators- TBIs in India: Origin and current status, Current policy for TBI promotion in India. Technology business incubation: A global perspective- Types and classifications, TBIs: Goals and objectives, TBIs: Functions and services, TBI led process of business incubation, TBIs: Performance assessment in terms of outcomes and achievements, Technology business incubation for new venture creation: A theoretical perspective.

Unit III: Technology Business Incubators in India: Structure

L-9

Age, management, sponsor and focus area, Incubation Process- TBIs: Objectives, Services provided by Incubators- The Procedure of Incubation- Post Incubation Process-Start-up landscape and innovation Hubs- Startup business partnering, Startup culture, Co- founders, Preparing to Launch: Essential Components, Intellectual Property.

Unit IV: Start-up Policies

L-9

Start-up policy of Central Government and some leading State Governments Technology Business Incubator (TBI), Role of National Science and Technology Entrepreneurship Development Board (NSTEDB), DST guidelines for Seed Support System (SSS) for Startups in Incubators.

Unit V: Global Business

L-9

Globalization of Innovations, Innovation for emerging economies, Role of National Govt in Innovation, Strategic Innovation Process- Theories of International trade, Globalization forces- meaning, dimensions and stages in it, Tariff and nontariff barriers, Trading blocs. Global Operations - Global Production, Outsourcing and Logistics Management, Global HRM, Global Marketing. South East Asian currency crisis, Foreign Direct Investment.

TOTAL: 45 HOURS

8. Text Book

1. Bala Subrahmanya M.H. and Krishna H.S., "Technology Business Incubators in India- Structure, Role and Performance", De Gruyter Studies in Knowledge Management and Entrepreneurial Ecosystems, 2022
2. Philippe Lasserre, Global Strategic Management, Oxford: Macmillan Education: Palgrave 2018, 4th edition

9. Reference Books

1. Prashantham Shameen and George S. Yip, "Engaging with Startups in Emerging Markets", MIT Sloan Management Review. (2016).
2. Desai Vasant, "The dynamics of Entrepreneurial development and Management", Himalaya Publishing, 2009.

**INDEPENDENT
LEARNING**

S. No.	COURSE CODE	COURSES	L	T	P	C
1	2437MG8600	Summer Internship	0	0	6	3

Course Code	Course Name	L	T	P	C
2437MG8600	SUMMER INTERNSHIP	0	0	6	3

1. Preamble

This independent learning aims to develop an understanding of real-time problems /challenges in contemporary areas of management. The course offers thorough problem-based learning approach, guided by realistic and challenging industry requirements. The course provides on-job training on current industry-relevant problem through supervised self-learning approach.

2. Prerequisite

Knowledge on Research Methodology

3. Links to Other Courses

This course has links to courses like Research Methodology, Quantitative Techniques.

4. Course Educational Objectives:

Through this course the students will be:

1. To provide industrial exposure to student to the real time problems related to contemporary areas of management
2. Enable the students to work on short industry projects and come up with the solutions commensurate with the assigned problem to the students.
3. To impart skills in preparing detailed report describing the project and results/findings.
4. Identify gap in existing knowledge to help develop a specialization

5. Course Outcomes

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

Cos	Course Outcomes	Level of learning domain (Based on revised Bloom's)
CO1	Develop on the job the skills, knowledge, attitudes, and perceptions along with the experience needed to constitute a professional identity.	K3
CO2	Examine the organizational culture and dynamics and link with the academic learnings.	K4
CO3	Appraise the practical application of Business knowledge	K5
CO4	Examine actual supervised professional experiences and get insight in working of the real organizations.	K4
CO5	Conduct a structured study by identifying specific functional area and create and present a systematic report of the study.	K6

6. CORRELATION OF CO's WITH PO's

CO Nos.	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	M	H		H			H
CO2	M	H		M			H
CO3		M		H	H		H
CO4		H	M	M	H	M	H
CO5		H	M			H	H

Continuous assessment scheme for Internship

Review I (10)	Review II (15)	Assessment by Internship Guide (15)	Total (40 marks)
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Rubrics for evaluation of Summer Internship

Internship Preparation (20)	Presentation(20)	Question andAnswers (20)	Total (60 marks)
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Course Code	Course Name	L	T	P	C
	ABILITY ENHANCEMENT COURSE III MOOC COURSE	1	0	0	1

Ability Enhancement Courses are the courses based upon the content that leads to Knowledge enhancement. These courses are the set of value-based courses which aim to bring constructive behavioral changes to the students. Ability Enhancement course can be offered as department-offered courses or approved online learning platforms, as per student choice. The online learning platforms includes NPTEL/SWAYAM/MOOC platforms.

S. No.	Course Code	Course Title	L	T	P	C
1	2435MG1600	Working in contemporary Teams	1	0	0	1
2	2435MG1601	Decision Making under uncertainty	1	0	0	1
3	2435MG1602	Design Thinking -A Primer	1	0	0	1
4	2435MG1603	Business and Sustainable development	1	0	0	1
5	2435MG1604	Strategic Communication for sustainable development	1	0	0	1
6	2435MG1605	Cost Accounting	1	0	0	1
7	2435MG1606	Gender justice and workspace security	1	0	0	1
8	2435MG1607	Management of New Products and Services	2	0	0	5
9	2435MG1608	Management of Field Sales	2	0	0	2
10	2435MG1609	Technology Commercialization & New Product Development	2	0	0	12
11	2435MG1610	Advances in Strategic Human Resource Management	1	0	0	1
12	2435MG1611	Human Value and Ethics; Learning Professional Ethics for Life	1	0	0	1
13	2435MG1612	Working in contemporary Teams	2	0	0	2
14	2435MG1613	Decision Making under uncertainty	2	0	0	2
15	2435MG1614	Design Thinking -A Primer	2	0	0	2
16	2435MG1615	Business and Sustainable development	2	0	0	2
17	2435MG1616	Strategic Communication for sustainable development	2	0	0	2
18	2435MG1617	Gender justice and workspace security	2	0	0	2
19	2435MG1618	Management of New Products and Services	2	0	0	2
20	2435MG1619	Management of Field Sales	2	0	0	2
21	2435MG1620	Technology Commercialization & New Product Development	2	0	0	2
22	2435MG1621	Advances in Strategic Human Resource Management	2	0	0	2
23	2435MG1622	Digital Marketing in the AI era – Part I	2	0	0	2

Course Code	Course Name	L	T	P	C
2434MG3600	SKILL ENHANCEMENT COURSE III COGNITIVE ABILITY	0	0	2	1

1. Preamble

It is designed to integrate the quantitative problem-solving, logical thinking, language proficiency and practical communication exercises to develop well-rounded analytical and verbal competencies. Through the structured learning and hands-on practice, students will gain the necessary skills to perform effectively in competitive exams, campus placements and real-world professional scenarios.

2. Prerequisite

Basic knowledge of General English

3. Related Courses

Fundamental for MBA programs and other professional postgraduate disciplines.

4. Course Educational Objectives

Through this course the students will be able to:-

1. Develop the Quantitative and Logical Reasoning Skills and enhance Problem-Solving and Data Interpretation Skills
2. Improve Verbal Ability and Reading Comprehension metrics and build Effective Communication and Presentation Skills
3. Develop confidence in public speaking through group presentations and role-play activities.
4. Improve written communication by practicing essay writing and resume correction.
5. Gain practical exposure to interview scenarios through mock interview sessions.

5. Course Outcomes

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

Cos	Course Outcomes	Level of Learning domain (Based on Revised Bloom's)
C01	Applying mathematical formulas and logical strategies for problem-solving.	K3
C02	Applying logical frameworks and breaking down reasoning problems into structured solutions.	K3 & K4
C03	Examining and interpreting numerical data to derive meaningful conclusions.	K4 & K5
C04	Understanding language structures and applying critical reasoning techniques.	K2 & K3
C05	Assessing communication effectiveness and generating structured professional documents and presentations.	K5 & K6

6. Correlation of COs with POs

CO Nos.	PO1	PO2	PO3	PO4	PO5	PO6	PO7
C01	H	H					
C02	H	H					
C03	H	H					
C04			H				
C05			H	H			

H- High; M-Medium; L-Low

7. Course Contents

Unit I: Quantitative Aptitude Fundamentals **L-6**
Time, Speed and Distance (2), Problems on Train and Boat (2), Ranking and Ordering (1)

Unit II: Logical Reasoning **L-6**
Clocks (2), Calendar (1), Seating Arrangement (2)

Unit III: Analytical Techniques **L-6**
Permutation and Combination (2), Probability (1), Data Sufficiency (1), Data Interpretation (1)

Unit IV: Verbal Ability **L-6**
Voices (1), Speeches (1), Idioms and Phrases (1), Sentence Completion and Improvement (2), Reading Comprehension (2), Critical Reasoning (2), Para jumble (1)

Unit V: Professional Development **L-6**
Group Presentation (1), Role Play (1), Essay Writing (1), Resume Correction (1), Mock Interview (1)

TOTAL: 30 HOURS

8. Text books:

1. RS Aggarwal, Quantitative Aptitude, S. Chand Publication
2. RS Aggarwal, Logical Reasoning, S. Chand Publication
3. Cambridge University Press. (n.d.). *Communication*. In *Cambridge Dictionary*. Retrieved May 21, 2025, from <https://dictionary.cambridge.org/dictionary/english/communication>

9. Reference Books:

1. A Modern Approach to Verbal & Non-Verbal Reasoning, RS Aggarwal
2. Analytical & Logical Reasoning, Peeyush Bhardwaj, Arihant Publications

Semester IV Course Details

[illegible]

PROGRAMME CORE**SEMESTER IV**

Course Code	Course Name	L	T	P	C
2431MG1601	Business Strategy	3	0	0	3

1. PREAMBLE

This course covers the coordination and integration of the efforts within the different functional areas of an organization for dealing with an uncertain future. This comprises of formulating a business strategy for each individual unit of the firm, formulating a corporate strategy, and implementing these strategies.

2. PREREQUISITE

Managerial Economics, Startups and Entrepreneurship, and International Business Management.

3. LINKS TO OTHER COURSES

All functional electives.

4. COURSE EDUCATIONAL OBJECTIVES

After completing this course, students will be able to:

1. To understand the fundamental concepts, nature, and process of business strategy and its role in organizational success.
2. To analyse the internal and external environment of an organization using strategic analysis tools and frameworks.
3. To formulate appropriate business and corporate-level strategies to achieve sustainable competitive advantage.
4. To apply strategic implementation techniques, including structure, leadership, and control systems, for effective execution.
5. To evaluate strategic issues across various business functions and develop ethical, innovative, and sustainable strategic solutions.

5. COURSE OUTCOMES

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

Cos	Course Outcomes	Level of Learning domain (Based on Revised Bloom's)
CO1	Explain the meaning, nature, importance, and process of business strategy and its relevance to organizational success.	K2
CO2	Analyze the internal and external business environment using strategic tools such as SWOT, PESTLE, Value Chain, and Porter's Five Forces	K4
CO3	Discover appropriate competitive and corporate strategies to achieve long-term business objectives.	K4
CO4	Determine effective implementation and control mechanisms aligned with strategic goals and organizational structure.	K5
CO5	Examine strategic issues across various functions and propose innovative, ethical, and sustainable strategic decisions.	K4

6. CORRELATION OF CO's WITH PO's

CO Nos.	P01	P02	P03	P04	P05	P06	P07
CO1	H	M	L	M	L	M	H
CO2	M	H	M	H	M	M	H
CO3	M	H	M	M	L	H	H
CO4	M	H	M	M	H	L	H
CO5	M	H	H	M	H	M	H

H-High; M-Medium & L-Low

7. COURSE CONTENTS

UNIT I: INTRODUCTION TO BUSINESS STRATEGY

L-9

Meaning and nature of business strategy, its importance and relevance, characteristics of business strategy, the business strategy process - Relationship between a company's strategy and its business model - Strategy formulation - Developing a Strategic vision and mission for a company - Setting Objectives - Evolution of strategy in the digital era (AI, analytics, and agile strategy).

UNIT II: INDUSTRY ANALYSIS

L-9

Analyzing a company's external environment - The strategically relevant components of a company's external environment - Industry Analysis - Porter's dominant economic features - Competitive environment analysis - Porter's five force model - Industry driving forces - key success factors - Concept and implementation - Resource and capabilities durability of competitive advantage - Analysis of the company's present strategies - SWOT Analysis - Mc Kinsey's 7's Framework - Value chain Analysis - Bench marking - Strategic risk assessment and mitigation frameworks,

UNIT III: THE STRATEGIES

L-9

Generic Competitive Strategies - Low cost, Differentiation, Best cost, focused strategies - Strategic alliances, collaborative partnerships, mergers and acquisitions, joint ventures strategies - Outsourcing Strategies - International Business level strategies - Environmental Threat and Opportunity Profile (ETOP) - Organizational Capability Profile (OCP)-Strategic Advantage Profile (SAP) - Corporate Portfolio Analysis (CPA), Digital transformation strategies and business model reinvention

UNIT - IV: STRATEGY IMPLEMENTATION, EVALUATION & CONTROL

L-9

The implementation process - Resource allocation - Designing organizational structure - Designing Strategic Control Systems- Designing in controlling evaluation - Matching structure and control to strategy - Strategy implementation: staffing and directing evaluation & control in strategic management- implementing in outsourcing, Managing strategic failures and turnaround strategies

UNIT V: STRATEGIC ISSUES ACROSS DISCIPLINE

L-9

Strategic Marketing Issues - Strategic financial issues - Strategic Research & Development Issues - Strategic operational issues - Strategic HRM issues - Environmental Sustainability issues - Strategic issues in managing technology and innovation - Strategic issues for Profit and Non-Profit organizations - Strategic issues in entrepreneurial ventures & small businesses

TOTAL: 45 HOURS

8. TEXT BOOK

1. Charles W.L. Hill, Melissa. Schilling and Gareth R. Jones, "Strategic Management An Integrated Approach", Cengage Learning India Private Limited, 12th Edition, 2021.

9. REFERENCE BOOKS

1. John A. Pearce II, Richard B. Robinson, Amita Mital, "Strategic Management: Planning for Domestic and Global Competition", McGraw Hill Education, 14th Edition, 2018.
2. Srinivasan R., "Strategic Management: The Indian Context", Prentice Hall India Learning Private Limited, 6th Edition, 2016.
3. Jeremy Kourdi, "Business Strategy: A Guide to Effective Decision-Making", The Economist Publisher, 2015 Edition.
4. Jeyarathnam M., "Strategic Management", Himalaya Publishing House, 5th Edition, 2014.
6. Prasad L.M, "Strategic Management", Sultan Chand & Sons Publisher, 7th Ed, 2018.

DIGITAL MARKETING

Sl. No.	Course Code	Course Name	L	T	P	C
1	2432MG1637	Service Innovation and Customer Engagement	3	0	0	3
2	2432MG1638	Digital Consumer Behaviour	3	0	0	3
3	2432MG1639	Reputation and Influence Management	3	0	0	3
4	2432MG1640	Sales and Channel Management	3	0	0	3

Course Code	Course Name	L	T	P	C
2432MG1637	SERVICE INNOVATION AND CUSTOMER ENGAGEMENT	3	0	0	3

1. PREAMBLE

This course is designed to help the students to develop an understanding of the unique marketing needs and challenges faced by service organizations and manufacturing firms that use service as a competitive strategy in an increasingly challenging global environment. Learners will understand consumer behaviour in services, service innovation and quality management, service operations, and strategies for managing service promises.

2. PREREQUISITE

Basic knowledge of marketing management,

3. LINKS TO OTHER COURSES

Marketing Management, CRM, Consumer Behaviour and Marketing Research.

4. COURSE EDUCATIONAL OBJECTIVES

Through this course the students will be able to:

1. To understand marketing of services, characteristics and classification of services,
2. To know the Marketing mix, Product decision, Pricing Strategies and Tactics, Learn the effective Management of Service Marketing.
3. To study the service quality.
4. To understand Marketing strategies for services in Financial Services, Health Service, Hospitality Services including travel, hotels and tourism, Professional Service, Public Utility Services and Educational Services.

5. COURSE OUTCOMES

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

Cos	Course Outcomes	Level of Learning domain (Based on Revised Bloom's)
C01	Outline the concepts of service marketing.	K2
C02	Explain the 7p's marketing mix for Services.	K2
C03	Make use of demand and supply for Capacity Planning.	K3
C04	Examine the SERVQUAL Model and identify quality gaps.	K4
C05	Relate the marketing strategies of various services.	K2

6. CORRELATION OF CO's WITH PO's

CO Nos.	PO1	PO2	PO3	PO4	PO5	PO6	PO7
C01	H	M	L	H	L	L	M
C02	H	H	M	M	M	M	M
C03	M	H	M	M	H	M	M
C04	M	H	M	H	M	M	H
C05	M	M	H	H	H	H	H

H- High; M-Medium; L-Low

7. COURSE CONTENTS

UNIT I: Foundations of Service Innovation and the Evolving Service Economy **L- 9**

Marketing services: Introduction - Growth of the service sector - The concept of service - Characteristics of service - Classification of service - Service innovation and design thinking in modern businesses, Service innovation and design thinking in modern businesses

UNIT II: DESIGNING THE SERVICE EXPERIENCE: THE 7PS AND BEYOND **L-9**

Marketing mix in service marketing: The 7P's: Product decision, Pricing, Strategies and Tactics, Promotion of service and placement of distribution methods for services - Additional dimension in services marketing - People, Physical evidence and process, Personalization, Omni channel, AI in service mix

UNIT III: STRATEGIC MANAGEMENT AND DELIVERY OF SERVICE EXCELLENCE **L-9**

Effective management of service marketing: Marketing demand and supply through capacity planning and segmentation - Internal marketing of services - External versus Internal orientation of service strategy, CRM, employee empowerment, data-driven service

UNIT IV: INNOVATING FOR SERVICE QUALITY AND CUSTOMER EXPERIENCE **L-9**

Delivering quality service: Causes of service - Quality gaps - The customer expectations versus perceived service gap, Factors and techniques to resolve perceived service gap - Quality standards, External communication to the customers - The promise versus delivery gap - Developing appropriate and effective communication about service quality - Measuring service quality - SERVQUAL - Service quality function development - Voice of the customer (VoC) systems and Net Promoter Score (NPS)

UNIT V: SERVICE STRATEGIES, CUSTOMER ENGAGEMENT, AND SECTORAL INNOVATIONS **L- 9**

Marketing of service with special reference: Financial services - Health service - Hospitality services including travel, hotels and tourism - Professional service - Public utility services - Educational services - Service advertising strategies- Strategies to match service promises with delivery- Ethics in Service Firms - Customer engagement strategies across digital and physical touchpoints

TOTAL: 45 HOURS

6. TEXT BOOK

1. Shajahan, S. (2017). Services Marketing: Concepts, Practices & Cases from Indian Environment (1st ed.). Himalaya Publishing House.

8. REFERENCE BOOK

1. Lovelock, C., Wirtz, J. and Chatterjee, J., "Services Marketing", 7th Edition, Pearson, 2017
2. Sinha, P.K., & Sahoo, S.C. (2019). Services Marketing (1st ed.). Himalaya Publishing House.
3. Rao, K. Rama Mohana. (Second edition). Services Marketing. Pearson Education India.
4. Sinha, M., Bhandari, A., & Priya, S. (Eds.). (2024). Improving Service Quality and Customer Engagement with Marketing Intelligence. IGI Global.

COURSE CODE	COURSE NAME	L	T	P	C
2432MG1638	DIGITAL CONSUMER BEHAVIOUR	3	0	0	3

1. Preamble

This course, Digital Consumer Behaviour, equips students with the theories, frameworks, and practical skills needed to analyse how people think, feel and act in digital environments. We begin with foundations: how connectivity, mobility and platform ecosystems have changed the role of information, social proof and feedback in purchase journeys. Students learn how the consumer lifecycle — awareness, search, evaluation, purchase and post-purchase engagement — looks different when mediated by algorithms, user-generated content, and mobile moments.

2. PREREQUISITE

Basic knowledge of Principles of Marketing and Consumer Behaviour, Fundamentals of Digital Marketing and Awareness of current digital and social media platforms

3. LINKS TO OTHER COURSES

Consumer behaviour and Digital marketing

4. COURSE EDUCATIONAL OBJECTIVES

After completing this course, students will be able to:

1. Explain the foundations and evolution of consumer behaviour in digital environments.
2. Analyse how psychological processes (perception, learning, memory) operate in online contexts.
3. Assess the influence of self-identity, social networks and culture on digital consumption.
4. Design digital interventions (content, UX, loyalty mechanisms) that improve engagement and conversion.
5. Use analytics and measurement methods to link digital consumer signals to business outcomes.

5. COURSE OUTCOMES

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

COs	Course Outcomes	Level of Learning domain (Based on Revised Bloom's)
C01	Summarize the foundations and transformation of consumer behaviour in the digital age.	K2
C02	Examine internal psychological processes such as perception, learning, and memory in digital contexts.	K4
C03	Analyze how self-concept, identity and personal values influence digital consumption and engagement.	K4
C04	Apply decision-making models to design and evaluate digital touchpoints and post-purchase experiences.	K3
C05	Create data-driven digital marketing strategies using consumer insights to enhance engagement and loyalty.	K6

6. CORRELATION OF CO's WITH PO's

CO NOS	P01	P02	P03	P04	P05	P06	P07
C01	M			M			
C02		H		M			
C03		M	M				
C04	M	M			M		
C05				H	M	M	L

H- High; M-Medium; L-Low

7. COURSE CONTENTS

UNIT I: DIGITAL CONSUMER FOUNDATIONS**L-9**

Introduction of consumer behaviour -Transformation of consumer behaviour in the digital age - Customer value in the digital era: technology, digital culture, omnichannel, “always-on” consumer- Digital devices, connectivity, mobile access – how consumers are continuously connected -Changing roles of search, reviews, peer feedback, social media iconsumer journeys- Overview of digital consumer lifecycle, Digital customer value metrics, Case Studies.

UNIT II: INTERNAL INFLUENCES IN A DIGITAL WORLD**L 9**

Internal psychological factors: perception, learning & memory in the digital context- How online research, UGC, social posts affect consumer learning, attitude, and memory - Learning & Memory (in the Digital Context). Implications of digital access/restrictions & platforms for consumer behaviour. Case discussions: how memory and learning differ when mediated by digital vs face-to-face contexts, Content Marketing and Post Creation.

UNIT III: IDENTITY & INFLUENCE IN DIGITAL CONSUMPTION**L 9**

Self-concept, identity and digital consumption: social media, online communities, 24/7 access-Gender identity, definitions of beauty and digital consumer culture-Individual traits & values: how digital consumers differ (personality, values, online behaviour)-Use of digital consumer data: identifying consumer personalities, segmentation, profiling- Social identity theory and influencer impact (micro-influencers vs macro).

UNIT IV: DIGITAL DECISION & POST-PURCHASE DYNAMICS**L 9**

Decision making and product use in digital contexts- Persuasive communications in digital marketing- “Showrooming”, webrooming, peer reviews, digital touch-points across decision stages-post-purchase engagement and loyalty in a digital world: mobile apps, communities, feedback loops- Case studies: brand digital journeys, consumer interaction patterns, and digital usage behaviour, After-sales digital engagement: communities, chatbots, CX automation.

UNIT V: SOCIAL & CULTURAL DYNAMICS OF DIGITAL CONSUMERS**L 9**

Social & cultural influences on digital consumer behaviour- Subcultures, micro-cultures in digital settings, global vs local marketing strategies in digital age- Impact of “always-on” mobile/mobile communities on consumption patterns-Social groups, forums, peer influence, online communities- Global digital marketing strategies vs local adaptation; cross-cultural issues in digital consumer behaviour, Cross-cultural adaptation of digital campaigns (global vs local strategy).

TOTAL: 45 HOURS**8. Text Book**

1. Jain, V., Schultz, D., & Sheth, J. N. (2019). Consumer Behaviour: A Digital Native (1st ed.). Pearson Education India. ISBN 978-9353437695.

9. Reference Books

1. Kumar, S. R. (2022). Consumer Behaviour: The Indian Context (Concepts & Cases) (2nd ed.). Pearson Education India. ISBN 978-9332586499.
2. Majumdar, R. (2009). Consumer Behaviour: Insights from Indian Market. PHI Learning Pvt. Ltd. ISBN 978-8120339637.
3. Nair, S. R. (2020). Consumer Behaviour in Indian Perspective (2nd ed.). Himalaya Publishing House. ISBN 978-93-5097-499-5.
4. Mukherjee, S. (2012). Consumer Behaviour (1st ed.). Cengage India. ISBN 978-935350
5. Kumar, S. R., & Krishnamurthy, A. (2020). Advertising, Brands & Consumer Behaviour: The Indian Context. Sage Publications India. ISBN 978-9353883928.

Course Code	Course Name	L	T	P	C
2432MG1639	REPUTATION AND INFLUENCE MANAGEMENT	3	0	0	3

1. PREAMBLE

This course, Reputation and Influence Management, equips students with the conceptual frameworks and practical skills needed to build, monitor, protect, and enhance an organization's reputation in the digital age.

2. PREREQUISITE

For an optimum grasp from this course, students can have a basic knowledge of E-commerce, social marketing.

3. LINKS TO OTHER COURSES

Digital Marketing and e-commerce.

4. COURSE EDUCATIONAL OBJECTIVES

Through this course, the students will be able to:

- Understand the fundamentals of reputation formation, the online reputation landscape, and the types of threats businesses face.
- Use social listening and monitoring tools to track brand conversations and identify reputational signals.
- Measure online sentiment and connect reputation indicators to business metrics and decision-making.
- Design and implement response tactics, crisis plans, and legal/ethical interventions to defend brand reputation.
- Create integrated ORM strategies that combine proactive influence-building (content, influencers, PR) with defensive measures and monitoring systems.

5. COURSE OUTCOMES

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

Cos	Course Outcomes	Level of Learning domain (Based on Revised Bloom's)
CO1	Outline the scope, importance and threats of online reputation management.	K2
CO2	Organize key listening and monitoring tools to gather brand conversation data.	K3
CO3	Analyse sentiment and link reputation indicators to business metrics.	K4
CO4	Determine tactical responses to negative conversations and lead crisis communication.	K5
CO5	Examine comprehensive ORM strategies that combine influence building and reputation defense.	K4

6. CORRELATION OF CO's WITH PO's

CO Nos.	P01	P02	P03	P04	P05	P06	P07
CO1	M			H			L
CO2		M		M		H	
CO3	M	H		M			L
CO4		M	M	H	L		
CO5	M	H	M	M	H	H	M

H- High; M-Medium; L-Low

7. COURSE CONTENTS

UNIT I: FOUNDATIONS OF DIGITAL REPUTATION AND INFLUENCE**L-9**

Online reputation management: Opportunities and trends - Relevant global & local ORM success stories - Online reputation threats - Examine the demerits of digital reputation management, Reputation economics – Case Studies.

UNIT II: TOOLS AND TECHNIQUES FOR DIGITAL BRAND MONITORING**L-9**

Brand conversations: Importance of listening online - Tools for effective listening: Google alert, Tweet deck, Hoot suite, Radian - Competitive research - Exercise: Real time listening. Managing incidents - Formulating the right response, the rogue employee, and the backfiring campaign - social listening, advanced social listening platforms and workflow design –Case Studies.

UNIT III: MEASURING BRAND SENTIMENT & BUSINESS IMPACT**L-9**

Analyzing and measuring sentiment for a brand: correlation between sentiment and business metrics - measuring and analyzing sentiment for a brand - Exercise: real time analysis & measurement- Positive brand sentiment - working on listing, build and develop reputation, onward monitor and manage reviews, automated sentiment analysis: techniques, limitations, and bias mitigation- Case Studies.

UNIT IV: CRISIS RESPONSE AND NEGATIVE CONVERSATION MANAGEMENT**L-9**

Negative conversations on social media - Importance of acknowledgement - Effective response to negative conversations - Public vs Private resolution - Online reputation threats - strategic financial threats, social and environmental threats, behavioral and legal threats, operational and technological threats, Crisis simulations, Case Studies.

UNIT V: STRATEGIC FRAMEWORKS FOR REPUTATION & INFLUENCE**L-9**

ORM strategy framework: From objectives to measurement - Exercise: creating & presenting ORM strategy - Handling crisis - The changing face of crisis, preparing for a crisis, Responding to a crisis, and Recovering from a crisis, Future directions: AI in ORM (deep fakes, automated monitoring) – Case Studies.

TOTAL: 45 HOURS**8. TEXT BOOK**

1. Srinivas R. Pingali ,Shankar Prakash, Jyothi R. Korem , “Digital Transformation Strategies Theory and Practice”, Sage publication, 2021.
2. Elias M Award, “Electronic Commerce from Vision to Fulfilment”, PHI, 3rd Edition, 2006.

9. REFERENCE BOOKS

1. Kevin Pho, Susan Gay, “Establishing, Managing, and Protecting Your Online Reputation”, American Association for Physician, 2013.
2. David Szetela and Joseph Kerschbaum,” Pay-Per-Click Search Engine Marketing: An Hour a Day”, John Wiley & Sons, Inc., 2010.
3. Srinivas R. Pingali ,Shankar Prakash, Jyothi R. Korem , “Digital Transformation Strategies Theory and Practice”, Sage publication, 2021.
4. Gail Z.Marting , “The Essential Social Media Marketing Handbook: A New Roadmap for Maximizing Your Brand, Influence and Credibility”, Rupa Publications India, 2018.
5. Charlie Pownall, “Managing Online Reputation: How to Protect Your Company on Social Media” Springer, 2015.

Course Code	Course Name	L	T	P	C
2432MG1640	SALES AND CHANNEL MANAGEMENT	3	0	0	3

1. PREAMBLE

This course, Sales and Channel Management, equips students with practical knowledge and managerial skills required to design, operate, and evaluate effective sales organizations and distribution networks. In competitive markets, a firm's ability to sell value and manage channels effectively determines its reach, market share, and long-term profitability.

2. PREREQUISITE

The student should have completed the course "Marketing Management".

3. LINKS TO OTHER COURSES

Consumer Behaviour and Marketing Research.

4. COURSE EDUCATIONAL OBJECTIVES

Through this course the students will be able to: -

- Explain the roles, responsibilities and strategic importance of the sales function and distribution network in achieving marketing objectives.
- Develop sales plans including forecasting, budgeting, territory design and quota systems to support organizational targets.
- Design and implement manpower planning, recruitment, training and compensation systems to build an effective sales force.

5. COURSE OUTCOMES

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

COs	Course Outcomes	Level of Learning domain (Based on Revised Bloom's)
C01	Summarize the roles, organisation models and policies of the sales function in modern firms.	K2
C02	Explain the sales hierarchy, performance standards and legal/ethical issues in selling.	K2
C03	Apply forecasting, budgeting, quota and territory design methods to control sales effort.	K3
C04	Determine manpower plans (recruitment, selection, training, compensation) using sales forecasts.	K5
C05	Examine the role of distribution and channel strategy in the marketing mix, including transport, dealer management and omni-channel approaches.	K4

6. CORRELATION OF CO's WITH PO's

CO Nos.	PO1	PO2	PO3	PO4	PO5	PO6	PO7
C01	M				H	M	
C02		M					
C03	M	M					
C04	M				H		
C05	M			L	H	M	L

H- High; M-Medium; L-Low

7. COURSE CONTENTS

UNIT I: SALES FRAMEWORK AND CORPORATE SELLING DYNAMICS

L-9

Organization framework of the field sales force: types of field sales organization - career in field sales management. Field Sales Manager - Tasks and responsibilities - Relation with salesman and relationships with top management - Operating environment for field sales force - Theories of selling - Personal selling process - Digital and hybrid selling models (inside sales, remote selling, video selling), Lead Generation, Branding –Case Studies.

UNIT II: STRATEGIC SALES PLANNING AND PERFORMANCE MANAGEMENT

L-9

Information and planning: Qualities and role - Hierarchy of objectives and goals, Concept of strategies and tactics, importance -Emerging issues in selling aspects, ethical and legal aspects of selling, measures for making selling an attractive career, Recent trends in selling, Sales organization structures - Sales audit and analysis, Ethical selling frameworks and consumer protection regulations, CRM Tools– AI interference in CRM- Case Studies.

UNIT III: SALES FORECASTING AND CONTROL MECHANISMS

L-9

Sales forecasting: methods - Sales budget: types - Sales quotas - Sales territories - Sales Controlling and sale cost analysis, Predictive sales forecasting using basic analytics & rolling forecasts –Case Studies.

UNIT IV: SALES TEAM DESIGN, DEVELOPMENT, AND COMPENSATION STRATEGIES

L-9

Staffing - Determining manpower requirements - Recruiting, Methods and the selection system - Managerial evaluation - Man power planning - Tasks, Skill, Qualification, Responsibility- ties, Tools and Methods of Selection - Training, Motivational and compensation procedures for sales force - Method of financial incentives and its purpose - Designing a compensation plan - Salesmanship - Sales Positions - Sales meeting and sales contest - Legal aspects of sales contracts and digital transactions- Case Studies.

UNIT V: BUILDING AND MANAGING HIGH-PERFORMANCE MARKETING CHANNELS

L-9

Distribution: Role of distribution in the marketing mix - Transport and handling: Economics of transportation, Determining optimum mode of transport - Organisation, machines, Procedures and documentation - Dealer network: Role of middlemen/dealer in marketing and distribution - Dealer functions at wholesale and retail level - Strategic plan of network - Omnichannel integration; last-mile models; channel conflict in digital era; green logistics -Case Studies.

TOTAL: 45 HOURS

8. TEXT BOOK

1. Still R.R., "Sales Management: Decision Strategy and Cases," Pearson, 6th Edition, 2017.

9. REFERENCE BOOKS

1. Havalder, K. and Cavale, V., "Sales and Distribution Management", Tata McGraw-Hill Education, 3rd Edition, 2017.
2. Mallik, P.K., "Sales Management", Oxford University Press, 2012.
3. Hair, J.F., Anderson, R.E., Mehta, R. and Babin, B., "Sales Management", South west-ern, 2020.
4. Kapoor, S. and Kansal, P., "Basics of Distribution Management: A Logical Approach", PHI Learning, 2009.
5. Cron, W.L. and De Carlo, T.E., "Sales Management: Concepts and Cases", Wiley India Pvt. Ltd., 10th Edition, 2011.

FINANCE ELECTIVES

Sl. No.	Course Code	Course Name	L	T	P	C
1	2432MG1641	Financial Derivatives	3	0	0	3
2	2432MG1642	Financial Modelling	3	0	0	3
3	2432MG1643	Commercial Banking and Financial Services	3	0	0	3
4	2432MG1644	Fintech an Blockchain Technology	3	0	0	3

Course Code	Course Title	L	T	P	C
2432MG1641	FINANCIAL DERIVATIVES	3	1	0	4

1. PREAMBLE

The course Financial Derivatives provides an understanding of derivative instruments such as futures, options, forwards, and swaps. It focuses on their pricing, trading strategies, and risk management applications. Students learn how derivatives are used to hedge against market volatility and enhance portfolio performance. The course equips learners with analytical skills to make informed financial and investment decisions

2. PREREQUISITE

A foundation of security analysis and investment

3. LINKS TO OTHER COURSES

Link to financial service, Investment Management, & **International Finance**

4. COURSE EDUCATIONAL OBJECTIVES

Through this course the students will be able: -

- To provide a comprehensive understanding of the concepts, types, and functions of financial derivatives.
- To develop the ability to use derivatives for hedging, speculation, and arbitrage purposes.
- To equip students with analytical skills for pricing and valuation of derivative instruments.
- To prepare learners for applying derivative strategies in financial decision-making and risk management.

5. COURSE OUTCOMES

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

Cos	Course Outcomes	Level of Learning domain (Based on Revised Bloom's)
C01	Explain the basics Derivative	K2
C02	Illustrate the future contract	K2
C03	Examine the contents of option in the securities markets	K4
C04	Determine the trading strategies in the markets	K5
C05	Analyze the swap and valuation	K4

6. CORRELATION OF COS WITH POS

CO Nos.	P01	P02	P03	P04	P05	P06	P07
C01	H	M					H
C02	H	H		H	H	M	H
C03	H	H	H	M	M		H
C04		H		H	H		H
C05	H	H		M	H	L	H

H- High; M-Medium; L-Low

7. COURSE CONTENTS

UNIT 1: INTRODUCTION TO DERIVATIVES

L-9

Derivatives – History and Evolution of Derivatives Market- Classification of Derivative Markets-Economic benefits, Features, applicability in risk mitigation, OTC TRADED markets and Exchange Traded markets. Forwards – Contracts, Long position payoff, short position payoff.

UNIT 2: FUTURES AND THEIR MECHANISMS

L-9

Futures – Specifications of futures contracts, Daily settlement mechanism, Mark to margin, Hedging using futures, Types of futures contracts - valuation / payoff- Valuation of Futures Contracts- Payoff Structure of Futures- Regulatory Framework and Exchanges- Currency and Interest Rate Futures- Clearing and Settlement Mechanism- Technological Integration.

UNIT 3: OPTIONS AND PRICING MODELS

L-9

Options – types: American and European, Call and Put options, Exchange traded options and OTC options features, hedging and trading, Black Scholes pricing model Binomial tree option pricing model, payoff for long positions in call and put options and payoff for short position in call and put options. Options Greek and their role in measuring the sensitivity of an options' price to different factors – Delta, Gamma, Vega, Theta and Rho.

UNIT 4: OPTION TRADING STRATEGIES

L-9

option trading strategies – synthetic long call Covered call, Long combo, protective call and put, covered put, long and short straddle, long and short strangle, collar, Bull call and put spread strategy, Bear call and put spread strategy, Long call butterfly, short call butterfly, Long call condor and short call condor.

UNIT 5: SWAPS AND STRUCTURED DERIVATIVES

L-9

Swaps – interest rate swap and currency swap - Types of Swaps– valuation of interest rate swap and currency swap- Applications and Benefits of Swaps- Swap Market and Regulation- Hybrid and Structured Swaps: Credit-linked swaps (CLS), Inflation swaps, Total return swaps (TRS) Commodity-linked currency swaps, Equity index-linked swaps- Regulatory Developments

TOTAL: 45 HOURS

8. TEXT BOOKS

1. John. C. Hull, Options, Futures and other Derivative Securities", PHI Learning, 9th Edition, 2012
2. Keith Redhead, „Financial Derivatives – An Introduction to Futures, Forwards, Options and SWAPs", PHI Learning, 2011.

9. REFERENCE BOOKS

1. Stulz, Risk Management and Derivatives, Cengage Learning, 2nd Edition, 2011.
2. Varma, Derivatives and Risk Management, 2nd Edition, 2011.
3. David Dufresne – „Option and Financial Futures – Valuation and Uses, McGraw Hill International Edition.
4. Gupta S.L., Financial Derivatives- Theory, Concepts and Practice, Prentice Hall Of India, 2011. Website of NSE, BSE.

Course Code	Course Name	L	T	P	C
2432MG1642	FINANCIAL MODELLING	2	1	0	3

1. PREAMBLE

The course "Financial Modelling" is designed to provide students with a comprehensive understanding of the various financial models and the use of Ms EXCEL as financial modelling tools. The subject guides the students about the vital role that Excel in creating the financial models.

2. PREREQUISITE

Investment analysis, financial derivatives concepts students studied in previous semesters.

3. LINKS TO OTHER COURSES

Investment Analysis and Portfolio Management and Financial derivatives.

4. COURSE EDUCATIONAL OBJECTIVES

Through this course the students will be able to: -

1. The course financial modelling introduces the various financial models.
2. An in-depth insight into the Various Excel functions in modelling.
3. It is designed to familiarize to use financial models to make better financial decisions.
4. Enhance knowledge on capital budgeting models.
5. Establishing appropriate financial models on derivatives instruments.

5. COURSE OUTCOMES

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

Cos	Course Outcomes	Level of Learning domain (Based on Revised Bloom's)
C01	Explain the basic concepts on financial models.	K2
C02	Interpret the concept and functions of Ms excel.	K2
C03	Choose the construction of financial models on corporate finance	K3
C04	Examine the various models on investment and portfolio analysis	K4
C05	Analyze the derivatives models.	K4

6. CORRELATION OF CO's WITH PO's

CO Nos.	P01	P02	P03	P04	P05	P06	P07
C01	M	H		M		M	H
C02	M		M	L	M	H	M
C03		H	H		M	M	H
C04	M	M	M	H	H	M	
C05		H	M		M		H

H- High; M-Medium; L-Low

7. Course Contents

UNIT I: INTRODUCTION TO FINANCIAL MODELLING & BUILT IN FUNCTIONS USING SPREAD SHEETS

L-9

Introduction to Financial Modelling- Need for Financial Modelling- Steps for effective financial modelling- Introduction to Time value of money & Lookup array functions: FV, PV, PMT, RATE, NPER, Vlookup, Hlookup, if, countifetc – Time value of Money Models: EMI with Single & Two Interest rates –Loan amortisation modelling- Debenture redemption modelling

UNIT II: BOND & EQUITY SHARE VALUATION MODELLING

L-9

Bond Valuation – Yield to Maturity (YTM): Rate Method Vs Irr Method-Flexi Bond and Strip Bond YTM Modelling- Bond Redemption Modelling -Equity Share Valuation : Multiple Growth Rate Valuation Modelling with and Without Growth Rates

UNIT III: CORPORATE FINANCIAL MODELLING

L-9

Alt Man Z Score Bankruptcy Modelling-Indifference Point Modelling – Financial Break--Even Modelling -Corporate Valuation Modelling (Two Stage Growth)- Business Modelling For Capital Budgeting Evaluation: Payback Period, NPV, IRR and Mirr

UNIT IV: PORTFOLIO MODELLING

L-9

Risk, Beta and Annualised Return –Security Market Line Modelling –Portfolio Risk Calculation (Equal Proportions)- Portfolio Risk Optimisation (Varying Proportions)-Portfolio Construction Modelling

UNIT V: DERIVATIVE MODELLING

L-9

Option pay off modelling: Long and Short Call & Put options -Option pricing modeling (B-S Model)-Optimal Hedge Contract modelling

TOTAL: 45 HOURS

8. TEXT BOOK

1. Wayne L Winston," Microsoft Excel 2016-Data Analysis and Business Modelling ", PHI publications, (Microsoft Press),New Delhi,2017.

9. REFERENCE BOOKS

1. Chandan Sen Gupta, "Financial analysis and Modelling –Using Excel and VBA" , Wiley Publishing House ,2014'
2. Craig W Holden, "Excel Modelling in Investments" Pearson Prentice Hall, Pearson Inc, New Jersey,5th Edition 2015
3. Ruzhbeh J Bodanwala, "Financial management using excel spread sheet", Taxman Allied services Pvt Ltd, New Delhi,3rd Edition 2015.

Course Code	Course Name	L	T	P	C
2432MG1643	COMMERCIAL BANKING AND FINANCIAL SERVICES	3	0	0	3

1. PREAMBLE

The course “Commercial Banking and Services” is designed to provide students with a comprehensive understanding of the structure, functions, and operations of commercial banks and the range of financial services they offer. The subject introduces the vital role that commercial banking plays in economic development, financial stability, and credit creation.

2. PREREQUISITE

Investment analysis, Forex management concepts students studied in previous semesters.

3. LINKS TO OTHER COURSES

Investment Analysis and Portfolio Management and IT for financial Services.

4. COURSE EDUCATIONAL OBJECTIVES

Through this course the students will be able to: -

1. The course commercial banking introduces the banking concepts, varied retail and wholesale products and fund and fee-based services offered by banks.
2. An in-depth insight into the Various Financial Services.
3. It is designed to familiarise on management of asset-liability of banks.
4. Enhance knowledge on credit appraisal and the recovery mechanism adopted by banks.
5. Establishing appropriate investment objectives, developing optimal portfolio strategies, estimating risk-return tradeoffs, evaluating investment performance and portfolio revision technique.

5. COURSE OUTCOMES

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

Cos	Course Outcomes	Level of Learning domain (Based on Revised Bloom's)
C01	Explain various banking concepts, retail cum wholesale products and services offered by banks.	K2
C02	Interpret the concept and functions of issue management.	K2
C03	Choose the factoring and bank asset by the investors.	K3
C04	Examine the credit appraisal techniques and recovery techniques adopted by bank.	K4
C05	Analyze the asset liability management of selected banks and modern banking services.	K4

6. CORRELATION OF CO's WITH PO's

CO Nos.	P01	P02	P03	P04	P05	P06	P07
C01	H	M		H		M	H
C02		H	L	H	M	H	H
C03		M	M		L	H	H
C04	H	H	M	H	H		H
C05	M	M		M	M		H

H- High; M-Medium; L-Low

7. COURSE CONTENTS

UNIT I: INTRODUCTION TO COMMERCIAL BANKING

L-9

Banks and bankers. Commercial banking - Overview – Functions- commercial banking in India- banking in modern era, Small Banks, Payment Banks - Customer relationship. Commercial services industry - Emergence – Developments - New financial products and services, Innovative financial and commercial instruments - Challenges ahead.

UNIT II: ISSUE MANAGEMENT

L-9

Commercial banking - Issues management intermediaries Commercial bankers / lead managers - Underwriters - Bankers, Brokers and registrars to an Issue - Share transfer agents - Debenture / Trustees - Portfolio managers - Issue management activities / Procedures - Eligibility norms - Pricing of Issues - Promoters' contribution - Issue of Indian Depository Receipts (IDR) - Issue advertisement - Issue of debt instruments - Book building - Green shoe Option - E-IPO - Private placement - Bought out deals - Placement with FIs, MFs, FIIIs, etc.

UNIT III: FACTORING AND BANK ASSETS

L-9

Factoring and forfeiting - Modus operandi, types, functions - Factoring in India - Bills discounting - Real estate industry - Housing finance system, National housing bank, NHB RESIDEX, Govt. Schemes Asset Liability Management in Banks.

UNIT IV: RETAIL - CREDIT AND PRIORITY SECTOR LENDING

L-9

Credit- Characteristics of credit - Cardinal Principles- credit appraisal and analysis and Appraisal Techniques; Credit assessment- Credit disbursement & monitoring – NPA Assessment & provisioning- Recovery procedures - CIBIL -Priority Sector Advances.

UNIT V: NEGOTIABLE INSTRUMENTS AND MODERN BANKING SERVICES

L-9

Payment and Collection of Cheques and Other Negotiable Instruments - NI Act; Role & Duties of Paying & Collecting Banks - Technology in Banking – Core Banking solutions payment systems and Electronic banking - Data Communication Network and EFT systems – security considerations – IT act- modern banking services- Challenges and prospects for modern banking.

TOTAL: 45 HOURS

8. TEXT BOOK

1. Fundamentals of Commercial Banking: An Applied Approach by Kent S. Belasco. Published around 2021.
2. Indian Institute of Banking (IIBF) - Principles and practices in banking – 5th edition- Macmillan education,2021.

9. REFERENCE BOOKS

1. Dr. T. S. Kavitha, Dr. P. Savitha, Dr. B. Vidya, and Ms. N. Ramalakshmi: An introductory text for commercial banking in India.
2. Prasanna Chandra, Investment Analysis and Portfolio Management, MC Graw Hill , 2017
3. Bodi, Kane, Markus, Mohanty, "Investments," Tata McGraw Hill, 8th Edition, 2011.
4. Madhu Viji & Swati Dhawan, "Merchant Banking and Financial Services", McGraw Hill Education, 2011.

Course code	Course Title	L	T	P	C
2432MG1644	FINTECH AND BLOCKCHAIN TECHNOLOGY	3	0	0	3

1. PREAMBLE

This course introduces students to emerging financial technologies and blockchain systems, transforming the financial sector. It provides a comprehensive understanding of digital payment systems, lending, wealth management innovations, decentralised finance, and blockchain architecture.

2. PREREQUISITE

Fundamental knowledge of financial management, banking operations, and basic information technology concepts.

3. LINKS TO OTHER COURSES

Financial Management, Financial Markets & Institutions and Information Technology for Managers.

4. COURSE EDUCATIONAL OBJECTIVES

Through this course, students will be able to:

1. Understand the structure, evolution, and applications of FinTech in the financial sector.
2. Explain the fundamentals and mechanisms of blockchain technology and cryptocurrencies.
3. Analyse the integration of blockchain with financial technologies across key domains.
4. Evaluate regulatory, ethical, and risk management frameworks for FinTech and blockchain.
5. Develop strategic insights and business models leveraging digital financial innovation.

5. COURSE OUTCOMES

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

Cos	Course Outcomes	Level of Learning domain (Based on Revised Bloom's)
C01	Explain the evolution, scope, and components of the FinTech ecosystem.	K2
C02	Outline blockchain fundamentals, smart contracts, and cryptocurrencies.	K2
C03	Analyze the applications of FinTech and blockchain across financial services.	K4
C04	Explain governance, risk, and regulatory frameworks for digital finance.	K5
C05	Assess innovative FinTech or blockchain-based business strategies.	K5

6. Correlation of COs with POs

CO Nos.	PO1	PO2	PO3	PO4	PO5	PO6	PO7
C01	H	M	H				
C02	H	H	H	H			
C03	H	H	M	H	H	M	H
C04	H	H	H	M	H		
C05	H	H	H			H	

H – High; M – Medium; L - Low

7. COURSE CONTENTS

UNIT I: INTRODUCTION TO FINTECH ECOSYSTEM

L-9

Definition, scope and evolution of FinTech – Financial innovation and digital transformation – FinTech ecosystem: start-ups, investors, regulators, and financial institutions – Major FinTech segments: Payments, Lending, WealthTech, InsurTech, RegTech – FinTech business models and platform economics – Emerging trends: Open Banking, API economy, Embedded Finance.

UNIT II: BLOCKCHAIN TECHNOLOGY FUNDAMENTALS

L-9

Introduction to Blockchain and Distributed Ledger Technology (DLT) – Structure of blocks, hashing, and consensus mechanisms – Cryptography and digital signatures – Bitcoin and Ethereum overview – Smart contracts and tokenization – Public vs. private blockchains – Blockchain scalability and interoperability.

UNIT III: APPLICATIONS OF FINTECH AND BLOCKCHAIN

L-9

Applications of FinTech in payments, lending, wealth management, insurance, and regulatory technology – Blockchain use cases in finance: cross-border payments, trade finance, and supply chain finance – DeFi (Decentralized Finance) and NFTs – Integration of blockchain with AI and IoT – Central Bank Digital Currencies (CBDCs) and digital identity.

UNIT IV: REGULATION, RISK AND GOVERNANCE IN FINTECH AND BLOCKCHAIN

L-9

Regulatory and compliance frameworks for FinTech and blockchain – RegTech innovations and supervisory technologies – Cybersecurity, data privacy and protection – Risk management in digital finance – Legal and ethical issues: algorithmic bias, financial inclusion, consumer protection – Blockchain governance and smart contract auditing.

UNIT V: STRATEGIC MANAGEMENT AND FUTURE TRENDS IN FINTECH AND BLOCKCHAIN

L-9

Strategic responses of banks and financial institutions to FinTech disruption – Innovation and partnership strategies – Funding and valuation of FinTech startups – Investment trends and venture capital – Web3, Token Economy, and the future of digital finance – Sustainable and green FinTech

TOTAL: 45 HOURS

8. TEXT BOOKS

1. Susanne Chishti and Janos Barberis (2016), The FINTECH Book: The Financial Technology Handbook for Investors, Entrepreneurs and Visionaries, Wiley, UK.
2. Don Tapscott and Alex Tapscott (2016), Blockchain Revolution: How the Technology Behind Bitcoin and Other Cryptocurrencies Is Changing the World, Penguin Random House, New York.

9. REFERENCE BOOKS

1. Paul Vigna and Michael J. Casey (2015), The Age of Cryptocurrency: How Bitcoin and Digital Money Are Challenging the Global Economic Order, St. Martin's Press, USA.
2. Imran Bashir (2020), Mastering Blockchain: Unlocking the Power of Cryptocurrencies, Smart Contracts, and Decentralized Applications, Packt Publishing, 3rd Edition.
3. Paolo Sironi (2016), FinTech Innovation: From Robo-Advisors to Goal-Based Investing and Gamification, Wiley.
4. Natarajan, P. (2021), Introduction to FinTech and Blockchain Technology, McGraw Hill Education, India.

HR ELECTIVES

Sl. No.	Course Code	Course Name	L	T	P	C
1	2432MG1645	Industrial Relation and Conflict Management	3	0	0	3
2	2432MG1646	Performance Management and Competency Mapping	3	0	0	3
3	2432MG1647	Interpersonal Effectiveness	3	0	0	3
4	2432MG1648	Organizational Development and Sustainability	3	0	0	3

Course Code	Course Title	L	T	P	C
2432MG1645	INDUSTRIAL RELATION AND CONFLICT MANAGEMENT	3	1	0	4

1. PREAMBLE

Industrial relations form the cornerstone of harmonious employer-employee engagement in an industrial setting. This course introduces students to the fundamental concepts, legislative frameworks, and contemporary practices governing industrial relations and conflict management. It explores the evolution of trade unions, government labor policies, and the impact of globalization on industrial relations in India. The course further emphasizes labour welfare legislation, social security schemes, and the dynamics of conflict within organizations, equipping students with theoretical and practical tools to resolve industrial disputes and foster a productive work environment.

2. PREREQUISITE

Basic knowledge of principles of management, organizational behaviour and business law.

3. LINKS TO OTHER COURSES

Human Resource Management, Business Ethics and Corporate Social Responsibility, Organizational Behaviour and Project Work.

4. COURSE EDUCATIONAL OBJECTIVES

Through this course the students will be able: -

1. Understand the framework and evolution of industrial relations in India.
2. Examine labour legislations governing employment conditions and social security.
3. Apply conflict management styles and strategies for dispute resolution.
4. Analyse the causes, nature, and process of industrial and organizational conflicts.

5. COURSE OUTCOMES

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

COs	Course Outcomes	Level of Learning domain (Based on Revised Bloom's)
C01	Explain the concept, approaches, and changing dimensions of industrial relations in India.	K2
C02	Interpret the provisions of key labor legislations like Industrial Employment (Standing Orders) Act, Factories Act, EPF Act, and ESI Act.	K2
C03	Examine the roles of trade unions, employers' associations, and government policies in shaping industrial relations.	K4
C04	Analyse theories and models of conflict such as Pondy's and the Conflict Spiral, and address ethical and multicultural workplace conflicts.	K4
C05	Develop conflict resolution strategies using emotional intelligence and technology-mediated tools in hybrid and global work environments.	K3

6. CORRELATION OF CO's WITH PO's

CO Nos.	P01	P02	P03	P04	P05	P06	P07
C01	M	H				H	
C02		H					
C03	M	H	M		M		
C04			M			H	L
C05		H		L	M	H	

H- High; M-Medium; L-Low

7. COURSE CONTENTS

UNIT I: BACKGROUND TO INDUSTRIAL RELATIONS

L-9

Understanding Employer - Employee Relations / Industrial Relations - Approaches to Industrial Relations - Changing Dimensions of Industrial Relations in India. Trade Unions - Growth of Trade Unions - COD (charter of demand)- Managerial Associations - Employers' Associations Government Labour Policies - Approaches to IR - Impact of globalization on IR.

UNIT II: INDUSTRIAL EMPLOYMENT (STANDING ORDER) ACT- 1946

L-9

Objective - Scope & Applicability of the Act - Definitions - Concept & Nature of Standing - Orders Certification Process - Penalties & Procedure. The Factories Act 1948 - Object- Scope & Applicability - the Act - Definitions - Approval - Licensing & Registration of Factories - The Inspecting staff - Powers - Duties of Inspectors - Health - Safety & Welfare of the Workers.

UNIT III: SOCIAL SECURITY SCHEME

L-9

Object & Applicability of the Act - Employees State Insurance Act 1948 - Object - Scope & Applicability of the Act - Definitions - Scheme of Contribution - ESI Corporation Composition - Powers & Duties - Benefits under the ESI Scheme - The EPF Scheme - Contribution - Rate of interest & Withdrawals - Recent Amendments in EPF -The Employees' Pension Scheme 1995 - Membership & contribution - Benefits under Pension Fund Scheme 1995. - Maternity Act 1961- Gratuity Act 1972

UNIT IV: CONFLICT MANAGEMENT AND ITS STYLE

L-9

Concept and definition of conflict - Types of conflict: Intrapersonal, Interpersonal, Intragroup, Intergroup, and Organizational - Positive and negative aspects of conflict - Stages of conflict and conflict process - Causes and symptoms of organizational conflicts - Conflict management styles (Thomas-Kilmann model: Competing, Collaborating, Compromising, Avoiding, Accommodating) - Individual and team approaches to conflict resolution - Role of emotional intelligence in managing conflicts

UNIT V: THEORIES, MODELS AND ISSUES OF CONFLICT

L-9

Traditional vs. Contemporary views of conflict - Pondy's model of organizational conflict - Conflict spiral and escalation model - Psychological and sociological perspectives on conflict Role of perception, attitude, and behavior in conflict situations- Conflict management in virtual and hybrid workplaces - Workplace bullying, harassment, and ethical conflicts - Conflict in multicultural and global teams - Technology-mediated conflict resolution tools

TOTAL: 45 HOURS

8. TEXT BOOK

1.Sharma R.C, "Industrial Relations and Labour Legislation", PHI Learning Private Limited, Latest Edition, 2016.

9. REFERENCE BOOKS

- 1.Gupta CB, Kapoor N.D., Tripathi PC, "Industrial Relations and Labor Legislation", Sultan Chand, 6th Edition, 2020.
- 2.Sreenivasan M.R., "Industrial Relations and Labour Legislation", Margham Publications, 3rd Edition, 2012.
3. Rahim, M. A. (2011). Managing conflict in organizations (4th ed.). Transaction Publishers.
4. Robbins, S. P., & Judge, T. A. (2022). Organizational behavior (19th ed.). Pearson Education.

Course Code	Course Title	L	T	P	C
2432MG1646	PERFORMANCE MANAGEMENT AND COMPETENCY MAPPING	3	1	0	4

1. PREAMBLE

Performance management and competency mapping are critical pillars of modern human resource practices that ensure organizational effectiveness and employee growth. This course provides a comprehensive understanding of performance management systems, including their evolution, planning, implementation, and evaluation. It also explores competency-based HR frameworks for recruitment, training, development, and succession planning. Students will learn how to integrate performance metrics with competency models, identify skill requirements across industries, and apply emotional intelligence concepts to enhance individual and team performance.

2. PREREQUISITE

Basic understanding of Human Resource Management, Training & Development and Performance Appraisal Systems.

3. LINKS TO OTHER COURSES

Strategic Management, Learning & Development and Project Work.

4. COURSE EDUCATIONAL OBJECTIVES

Through this course the students will be able: -

- Understand the evolution, purpose, and scope of performance management systems in organizations.
- Develop skills to plan, design, and implement performance management processes and documentation.
- Explain the concept and importance of competency mapping across roles and career levels.
- Identify competency requirements and frameworks across various sectors and job types.

5. COURSE OUTCOMES

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

COs	Course Outcomes	Level of Learning domain (Based on Revised Bloom's)
C01	Explain the evolution, objectives, and significance of performance management and its linkage with HR processes.	K2
C02	Develop and evaluate performance management plans, agreements, and documentation mechanisms.	K3
C03	Analyse the concept, types, and applications of competency mapping across levels and organizations.	K4
C04	Identify and define competency requirements across diverse industries and job functions.	K3
C05	Construct competency models integrating emotional intelligence frameworks for individual and organizational effectiveness.	K3

6. CORRELATION OF CO's WITH PO's

CO Nos.	P01	P02	P03	P04	P05	P06	P07
C01	M	H				L	
C02	H	M		L			
C03	H		L	M			
C04			H			M	L
C05		M			L	H	

H- High; M-Medium; L-Low

7. COURSE CONTENTS

UNIT I: INTRODUCTION TO PERFORMANCE MANAGEMENT

L-9

Definition of Performance Management - Evolution of Performance Management - definitions and Differentiation of Terms Related to Performance Management -Importance of Performance Management - Linkage of Performance Management to Other HR Processes.

UNIT II: PERFORMANCE MANAGEMENT PLANNING AND DEVELOPMENT

L-9

Introduction - Performance Management Planning - the Planning Process – Performance Agreement - Drawing up the Plan - Evaluating the Performance Planning Process. Manager's Responsibility in Performance Planning Mechanics and Documentation - Employee's Responsibility in Performance Planning Mechanics and Documentation-9 Box Matrix - OKR

UNIT III: INTRODUCTION TO COMPETENCY MAPPING

L-9

Introduction - Concept and Meaning - Types/Classification of competencies – Usage of competencies at entry and mid - Career level - Competency mapping at different levels - Corporate companies / institutions- HR interview and Individual level methods of competency mapping.

UNIT IV: PROCESS OF COMPETENCY MAPPING

L-9

Identifying competency requirement for various sectors of employment / various jobs IT - ITES Insurance - Banking and other financial service - Entertainment - Health service - Pri- vate education and training and defining competency requirements - skills- tasks - activities and technologies / techniques used for various types of jobs in service sector – Manufacturing sector.

UNIT V: COMPETENCY MODELS

L-9

Steps for developing a valid competency model - Goleman's emotional intelligence model - Aspects of emotional intelligence - Self-awareness – Social-awareness - Self-management and Relationship Management.

TOTAL: 45 HOURS

8. TEXT BOOK

1. Dewakar Goel., "Performance Appraisal and Compensation Management A Modern Approach" PHI Learning, 2nd Edition, 2015.

9. REFERENCE BOOK

1. Seema Sanghi, "The Handbook of Competency Mapping: Understanding Designing And Implementing Competency Models In Organizations", Sage Publications India Private Limited, 2016.
2. T.V.Rao, "Performance Management: Toward Organizational Excellence" SAGE Response; Second Edition, 2015.
3. Srinivas R. Kandula, "Competency-based human resource management", PHI Learning Pvt. Ltd., 2013
4. Ramesh Soundararajan, "Winning on HR Analytics: Leveraging Data for Competitive Advantage" Sage Publications India Pvt Ltd, 1st Edition, 2016.

Course Code	Course Title	L	T	P	C
2432MG1647	INTERPERSONAL EFFECTIVENESS	3	1	0	4

1. PREAMBLE

Interpersonal effectiveness is a vital competency for personal and professional success. This course aims to enhance students' understanding of themselves and others through the study of self-awareness, emotional intelligence, communication, and relationship-building strategies. It emphasizes self-regulation, empathy, social skills, and adaptability as key elements of effective interpersonal interaction. Students will explore models like Transactional Analysis, Johari Window, and the Myers-Briggs Type Indicator to assess and develop their interpersonal style. The course ultimately focuses on developing emotional resilience, constructive feedback mechanisms, and personal transformation for sustained well-being and professional excellence.

2. PREREQUISITE

Basic knowledge of principles of management, organizational behaviour and communicational skills.

3. LINKS TO OTHER COURSES

Human Resource Management, Managerial Communication and Project Work.

4. COURSE EDUCATIONAL OBJECTIVES

Through this course the students will be able: -

9. Explain self-awareness through understanding one's values, personality, and emotional patterns.
10. Understand key models and theories for assessing self and others to improve interpersonal effectiveness.
11. Enhance interpersonal communication and relationship management skills in professional settings.
12. Cultivate emotional intelligence, adaptability, and trust for effective teamwork and collaboration.

5. COURSE OUTCOMES

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

COs	Course Outcomes	Level of Learning domain (Based on Revised Bloom's)
C01	Explain the importance of interpersonal effectiveness and demonstrate self-awareness through models such as Transactional Analysis and Life Script Analysis.	K2
C02	Analyse personality traits, emotions, and emotional intelligence using tools like MBTI, Enneagram, and Affective Events Theory.	K4
C03	Apply concepts like Johari Window and FIRO analysis to improve workplace relationships and give constructive feedback.	K3
C04	Examine interpersonal dynamics in organizational contexts including power, politics, diversity, and trust-building.	K4
C05	Develop a personal growth plan through resilience-building, self-talk, and spiritual well-being practices.	K3

6. CORRELATION OF CO's WITH PO's

CO Nos.	P01	P02	P03	P04	P05	P06	P07
C01	M	H				L	
C02		H					
C03	M	H	L		M		
C04			M			H	L
C05		H			L	H	

H- High; M-Medium; L-Low

7. COURSE CONTENTS

UNIT I INTRODUCTION TO INTERPERSONAL EFFECTIVENESS

L 9

Meaning and importance of interpersonal effectiveness- self-awareness, self-regulation, empathy, and social skills
Knowing Oneself - and values - Managing oneself - Self efficacy - Self Esteem - Pillars of Self Esteem - Transaction analysis - Life script analysis - strokes.

UNIT II ASSESSING THE SELF

L 9

Personality assessment - Meyers Briggs Type Indicator - Enneagram - Emotions and Moods - Affective events theory - Emotional Intelligence - Locus of control - Time Management - 4 A's of managing stress

UNIT III RELATING TO OTHERS

L 9

Interpersonal Effectiveness - Managing workplace relationship - Fundamental interpersonal relations orientation analysis - Johari window analysis - Constructive feedback - Adaptability quotient - Persuasion Strategies and Tactics.

UNIT IV INTERPERSONAL RELATIONSHIPS IN ORGANIZATIONS

L 9

Team dynamics and relationship building - Power, influence, and politics in interpersonal settings - Networking and collaboration across functions -Managing difficult people and workplace diversity - Psychological contracts and trust management

UNIT V PERSONAL TRANSFORMATION

L 9

Personal development - Process - Steps - Resilience - Theory and Practice - Personal Wellbeing
- Eudemonic and hedonic - Power of self-talk - Spirituality and well – being- Personal transformation and sustainability

TOTAL: 45 HOURS

8. TEXT BOOK

1. Robbins, S. P., & Judge, T. A. (2022). Organizational behavior (19th ed.). Pearson Education.

9. REFERENCE BOOKS

1. Andrew J DuBrin, "Human Relations - Interpersonal Job Oriented Skills" Pearson India (2019).
2. HBR's 10 Must Reads on "Managing People" (2016).
3. Lakshmi Ramarajan, "Building Effective Working relationships". Harvard Business School Module Note. (Revised January 2015).
4. David H. Johnson. "Reaching Out: Interpersonal Effectiveness and Self - Actualization", Pearson Education, (2014).

Course Code	Course Title	L	T	P	C
2432MG1648	ORGANIZATIONAL DEVELOPMENT AND SUSTAINABILITY	3	1	0	4

1. PREAMBLE

Organizations today operate in dynamic environments that demand adaptability, innovation, and responsibility toward people, profit, and the planet. This course explores the theories, processes, and interventions of Organizational Development (OD) and integrates them with principles of organizational sustainability. Students will gain insights into diagnosing organizational issues, implementing OD interventions, fostering sustainable organizational culture, and aligning corporate strategies with global sustainability frameworks such as Triple Bottom Line (TBL) and ESG. The course aims to prepare future leaders and HR professionals to create resilient, ethical, and socially responsible organizations.

2. PREREQUISITE

Basic understanding of Strategic Management and Corporate Ethics.

3. LINKS TO OTHER COURSES

Human Resource Management, Strategic Management, Change Management and Project Work.

4. COURSE EDUCATIONAL OBJECTIVES

Through this course the students will be able: -

1. Understand the concepts, values, and evolution of Organizational Development (OD).
2. Analyze and apply various OD interventions to enhance organizational effectiveness.
3. Examine the principles and frameworks of sustainability, including CSR, TBL, and ESG
4. Develop sustainable people management practices at micro and macro-organizational levels.

5. COURSE OUTCOMES

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

COs	Course Outcomes	Level of Learning domain (Based on Revised Bloom's)
C01	Explain the nature, objectives, and processes of Organizational Development and the role of OD practitioners.	K2
C02	Apply various OD interventions to improve individual, group, and organizational performance.	K3
C03	Analyze sustainability concepts and frameworks such as CSR, ESG, and Triple Bottom Line.	K4
C04	Develop sustainable HR and leadership practices promoting responsible behaviour and organizational growth.	K3
C05	Examine the factors affecting sustainability in diverse organizational contexts and propose solutions.	K4

6. CORRELATION OF CO's WITH PO's

CO Nos.	P01	P02	P03	P04	P05	P06	P07
C01	M	H				L	
C02		M	H	L			
C03		H	L	M			
C04			M			H	L
C05		H			L	H	

H- High; M-Medium; L-Low

7. COURSE CONTENTS

UNIT I: INTRODUCTION TO ORGANIZATIONAL DEVELOPMENT

L-9

Introduction to organizational Development: Concepts, Nature and Scope of O.D-Concept and evolution of OD- Objectives, values, and assumptions of OD-Organizational culture and climate - OD process and stages: Diagnosis, intervention, and evaluation -Role and competencies of an OD practitioner.

UNIT II: OD INTERVENTIONS

L-9

Human process interventions: Team building, interpersonal relations, coaching, and mentoring -Technostructural interventions: Job redesign, workflow management, total quality management (TQM) -Human resource interventions: Performance management, employee engagement, and learning culture -Strategic interventions: Organizational restructuring, mergers, and culture transformation-EXPERO Model – Self-Managed Team (SMT) and Self-Directing Team (SDT)

UNIT III: ORGANIZATIONAL SUSTAINABILITY

L-9

Meaning and dimensions of sustainability (economic, social, and environmental)-Triple Bottom Line (TBL) approach-Corporate Social Responsibility (CSR) and- Ethics- Environmental, Social, and Governance (ESG) framework-Sustainable organizational culture and leadership

UNIT IV: MICRO AND MACRO LEVEL SUSTAINABILITY

L-9

Sustainable Recruitment- Developing Sustainable Behaviour - Impactful Rewards and Recognition on Employee Behaviour - Engaging Employees through full range leadership - High Performance Work Culture, High-Trust Relationships, Responsible communication - Prosocial Behaviours- Corporate Sustainability- Green Human Resource Management and organizational Sustainability - organizational Growth and Lifecycle.

UNIT V: FACTORS AFFECTING SUSTAINABILITY AND DEVELOPMENT

L-9

Factors affecting Sustainability and Development - Diversity and Inclusion for sustainability, Case of sustainability in: Agriculture and non-profit organizations, - small businesses, public sector enterprises, educational institutions, for profit organizations, multinational organizations, virtual organizations

TOTAL: 45 HOURS

8. TEXT BOOKS

1.French, W. L., Bell, C. H., & Zawacki, R. A. (2005). Organization development and transformation: Managing effective change (6th ed.). McGraw-Hill Education.

9. REFERENCE BOOKS

1. Sharma, R. R (2019), Human Resource Management for Organizational Sustainability, Business Expert Press
2. Galpin T J, Whittington, J L & Bell, R G (2012), Leading the Sustainable Organization, Routledge, UK
3. Flamholtz, E G & Randle, Y (2016), Growing Pains: Building Sustainably Successful Organizations (5e), Wiley.

BUSINESS ANALYTICS ELECTIVES

Sl. No.	Course Code	Course Name	L	T	P	C
1	2432MG1649	Systems Modelling and Simulation	3	0	0	3
2	2432MG1650	Business Models	3	0	0	3
3	2432MG1651	Digital Platforms	3	0	0	3
4	2432MG1652	Society, Ethics and Analytics	3	0	0	3

Course Code	Course Name	L	T	P	C
2432MG1649	SYSTEM MODELLING AND SIMULATION	3	0	0	3

1. PREAMBLE

In an increasingly interconnected and dynamic world, understanding systems holistically is essential for effective decision-making, strategic planning, and organizational resilience. This course introduces students to the principles of systems thinking and simulation, equipping them with analytical tools to model, interpret, and influence complex systems.

2. PREREQUISITE

Basic knowledge of Information Technology.

3. LINKS TO OTHER COURSES

Functional electives & Projects.

4. COURSE EDUCATIONAL OBJECTIVES

Through this course the students will be able to;

1. To study the fundamentals of systems thinking and classify different types of systems.
2. To explore the behaviour and structure of dynamic systems using modelling tools.
3. To utilize simulation techniques to solve business and policy problems.
4. To implement system dynamics and agent-based models using appropriate tools.
5. To evaluate and validate simulation models for strategic decision-making and risk analysis.

5. COURSE OUTCOMES

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

Cos	Course Outcomes	Level of Learning domain (Based on Revised Bloom's)
C01	Explain the fundamentals of systems thinking.	K2
C02	Apply simulation techniques to solve business and policy problems	K3
C03	Analyze the behaviour and structure of dynamic system.	K4
C04	Identify tools for system thinking	K3
C05	Outline an agent-based models using appropriate tools	K2

6. CORRELATION OF CO'S WITH PO'S

CO Nos.	PO1	PO2	PO3	PO4	PO5	PO6	PO7
C01		H					M
C02		H			M		
C03	H	H	M	H	M		
C04	H	H	M	H		M	
C05	H	H		H		M	M

H- High; M-Medium; L-Low

7. COURSE CONTENTS

UNIT I: INTRODUCTION TO SYSTEMS THINKING

L-9

Systems: Natural and Artificial Systems, Dynamic Systems- Types of Systems: Simple, Complicated, Complex - Complex Systems: Learning in and about Complex Systems, Barriers and Requirements of Learning - System States and Behaviour - Varieties of Systems Thinking

UNIT II: SIMULATION

L-9

Need for Simulation - The modelling and simulation lifecycle - Model validation and verification - Types of Simulation models: System Dynamics, Discrete Event Simulation, Agent-based Modelling - Application of Modeling and Simulation in Business - Strategic decision-making using simulation models - Risk analysis and scenario planning - Optimization and decision support systems -Case studies in systems modelling and simulation

UNIT III: SYSTEM DYNAMICS

L-9

Applications of System Dynamics - Modelling Process: Purpose of Modelling, Overview and Steps of the Modelling Process - Structure and Behaviour of Dynamic Systems

UNIT IV: TOOLS FOR SYSTEMS THINKING:

L-9

Causal Loop Diagrams, Stocks and Flows, Modeling decision making, Formulating Nonlinear Relationships, Modeling Human behaviour Dynamics of Stocks and Flows - Tools of Modeling Dynamic Systems: Delays, Coflows and Aging Chains, Forecasting- Model Testing - Systems Archetypes

UNIT V: AGENT-BASED MODELING

L-9

Models, Agent-Based Models, and the Modeling Cycle - Describing and Formulating ABMs: The Overview, Design Concepts and Details (ODD) Protocol - Implementing Agent-Based Model using Netlogo: Introduction to NetLogo - Model Design Concepts: Emergence, Observation, Sensing, Adaptive Behaviour and Objectives, Prediction, Interaction, Scheduling, Stochasticity, Collectives - Pattern-oriented modelling - Model Analysis

TOTAL: 45 HOURS

8. TEXT BOOK

1. Law, A., & Kelton, W. D. 2000. Simulation Modeling and Analysis (3rd edition). McGraw-Hill Education.

9. REFERENCE BOOKS

1. Nigel, G., & Klaus, T. 2005. Simulation For The Social Scientist. McGraw-Hill Education (UK).
2. Railsback, S. F., & Grimm, V. 2011. Agent-Based and Individual-Based Modeling: A Practical Introduction (2nd ed.). Princeton University Press.
3. Sterman, J. D. 2000. Business Dynamics: Systems Thinking and Modeling for a Complex World. McGraw-Hill Education.
4. Weinberg, G. M. 2001. An Introduction to General Systems Thinking (25th edition). Dorset House Publishing Co Inc., U.S.

Course Code	Course Name	L	T	P	C
2432MG1650	BUSINESS MODELS	3	0	0	3

1. PREAMBLE

In today's dynamic and digitally driven economy, understanding business models is essential for strategic decision-making and innovation. Business models define how organizations create, deliver, and capture value, and they serve as the blueprint for sustainable competitive advantage.

2. PREREQUISITE

Basic knowledge of Information Technology.

3. LINKS TO OTHER COURSES

Functional electives & Projects.

4. COURSE EDUCATIONAL OBJECTIVES

Through this course the students will be able to;

1. To study the strategic significance of business models in organizational success
2. To explore the key components of business models including value creation, delivery, and capture.
3. To assess various types of business models across traditional and digital domains.
4. To make use of established frameworks to evaluate and innovate business models.
5. To develop a critical perspective on disruptive innovation and business model transformation

5. COURSE OUTCOMES

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

Cos	Course Outcomes	Level of Learning domain (Based on Revised Bloom's)
CO1	Outline the strategic significance of business models	K2
CO2	Identify key components of business models including value creation, delivery, and capture.	K3
CO3	Analyze the various types of business models across traditional and digital domains.	K4
CO4	Utilize established frameworks to evaluate and innovate business models. for system thinking	K3
CO5	Explain the critical perspective on disruptive innovation and business model transformation	K2

6. CORRELATION OF CO'S WITH PO'S

CO Nos.	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	H			H		H	
CO2	H	H			M	H	
CO3	H	H		H	M	H	M
CO4	H	H	M			H	M
CO5	H	H	M	H		H	

H- High; M-Medium; L-Low

7, COURSE CONTENTS

UNIT I: INTRODUCTION TO BUSINESS MODELS

L-9

Introduction to Business models - Business model as a key concept of strategic management; Generic business models - Pipeline vs. Platform business models; Value Architecture

UNIT II: KEY INGREDIENTS OF BUSINESS MODELS

L-9

Value creation, Value delivery, Value capture; Porter's Value Chain, Sustainable Competitive Advantage; Business model and the digital world – e-business models, types – B2B, B2C, C2C, D2C, B2G, Sharing economy

UNIT III: TYPES OF BUSINESS MODELS

L-9

Understanding business models – Types of business models – Brick and Mortar, Digital (Multi-sided) Platforms, Affinity clubs, Brokerage, Bundling, Leasing, Disintermediation, Freemium, Data-into-Assets, Razor-blade, Reverse Razor-blade, Subscription Club, Pas-as-you-go, User Communities, Product- service, Standardization, Negative Operating Cycle, Low Touch, Franchising, Drop shipping; Case studies of prominent business models; Business models vs. Revenue models – key differences

UNIT IV MODEL FRAMEWORKS

L-9

Introduction to business model frameworks – Business model canvas, Zott-Amit model, BM navigator, 4W approach, Hybrid business models; Business model innovation

UNIT V: APPROACHES TO BUSINESS MODEL INNOVATION

L-9

Reinventor approach, Adapter approach, Maverick approach, Adventurer approach; Disruptive Innovation; Case Studies on self-analysis of the business models of an Indian business enterprise

TOTAL: 45 HOURS

8. TEXT BOOK

1. Mariena Otolá, Iwona Grabowska. 2020, Business Model, Taylor and Francis Books India Pvt. Ltd.

9. REFERENCE BOOKS

1. Spencer, B. 2013. Business Model Design and Learning: A Strategic Guide. New York: Business Expert Press.
2. Hedman, J., & Kalling, T. 2003. Analysing e-business Models. In Towards the knowledge society: Ecommerce, ebusiness and eGovernment the Second IFIP Conference on E-Commerce.
3. Osterwalder, A., & Pigneur, Y. 2010. Business model generation: A handbook for visionaries, game changers, and challengers, 1. Chichester, UK: John Wiley & Sons..
4. Ritter, M., & Schanz, H. 2019. The sharing economy: A comprehensive business model framework. Journal of Cleaner Production, 213, 320–331
5. Schneider, S., & Spieth, P. 2013. Business model innovation: Towards an integrated future research agenda. International Journal of Innovation Management, 17(1).
6. Osterwalder, A. & Pigneur, Y. 2010, Business Model Generation, New Jersey: John Wiley & Sons.
7. Nielsen, C. & Lund, M. 2013. The Basic of Business Models. Copenhagen: Bookboon.com

Course Code	Course Name	L	T	P	C
2432MG1651	DIGITAL PLATFORMS	3	0	0	3

1. PREAMBLE

In the digital age, platforms have emerged as dominant business models, transforming industries and redefining value creation, delivery, and capture. From ride-sharing apps to global e-commerce giants, digital platforms orchestrate complex ecosystems that connect users, providers, and developers in real time.

2. PREREQUISITE

Basic knowledge of Information Technology.

3. LINKS TO OTHER COURSES

Functional electives & Projects.

4. COURSE EDUCATIONAL OBJECTIVES

Through this course the students will be able to;

1. To study the core principles and structures of digital platform business models.
2. To differentiate between types of digital platforms and their roles in the digital economy.
3. To evaluate strategic challenges such as platform competition, pricing, and user engagement.
4. To explore the governance mechanisms and ecosystem dynamics of platform-based businesses.
5. To examine global regulatory frameworks and ethical considerations in platform operations.

5. COURSE OUTCOMES

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

Cos	Course Outcomes	Level of Learning domain (Based on Revised Bloom's)
C01	Outline core principles and structures of digital platform	K2
C02	Compare between types of digital platforms and their roles in the digital economy.	K2
C03	Identify the strategic challenges such as platform competition, pricing and user engagement.	K3
C04	Examine the governance mechanisms and ecosystem dynamics of platform-based businesses.	K4
C05	Apply global regulatory frameworks and ethical considerations in platform operations.	K3

6. CORRELATION OF CO'S WITH PO'S

CO Nos.	PO1	PO2	PO3	PO4	PO5	PO6	PO7
C01	H			H	M	H	
C02	H	H		H	M	H	
C03	H	H	M			H	M
C04	H	H		H			M
C05			M	H			

H- High; M-Medium; L-Low

7, COURSE CONTENTS

UNIT I: DIGITAL PLATFORM AS A BUSINESS MODEL

L-9

Introduction to Platform Business Model – Digital Platform as a business model, Value architecture of digital platforms, Value creation, Value Delivery, Value Capture, Modified business model canvas for digital platforms; Digital Platform vs. Electronic Marketplaces; Multi-sided platforms - essential features, network effects.

UNIT II: PHANTOMIZATION

L-9

Digital Economy – Platform Economy, Gig Economy, Sharing Economy Typology of Digital Platforms: Basic types of digital platforms – infomediational platforms, matching platforms, transaction platforms, evaluation platforms, innovation platforms;

UNIT III: CHALLENGES OF DIGITAL PLATFORMS

L-9

Platform Openness, Network Mobilization – Chicken and egg problem, Platform Competition – platform envelopment and winner-take-all competition, Platform Pricing – monetizing and subsidizing; behavioural aspects of digital platforms – multi-homing, search and switching, customer stickiness, trust and user engagement.

UNIT IV: THE DIGITAL PLATFORM ECOSYSTEM AND GOVERNANCE

L-9

Platform as ecosystem – structure and dynamics – Roles of ecosystem participants: Owners, Providers, Users and Developers - Case studies on prominent digital platform businesses: Business models, Growth strategies and Ecosystem orchestration - Platform Governance and Control: Governance models: centralized vs decentralized platforms – Role of platform owners and moderators, Algorithmic governance and content moderation, Data ownership and user rights

UNIT V: REGULATION, AND ETHICS OF DIGITAL PLATFORMS

L-9

Regulatory Frameworks: Global regulatory trends affecting digital platforms, Antitrust and competition law in platform markets, Data protection laws (e.g. GDPR, CCPA), Compliance challenges for multi-national platforms – Ethical Considerations: Ethical dilemmas in platform design and operation, Bias and discrimination in algorithms, Transparency and accountability, Platform responsibility in misinformation and harmful content

TOTAL: 45 HOURS

8. TEXT BOOK

1. Srinivasan, R. 2021, Platform Business Models. Singapore: Springer.

9. REFERENCE BOOKS

1. Laure Claire Reillier, Benoit Reillier, 2017. Platform Strategy. 'How to unlock the Power of Communities' and Networks to grow your Business', Routledge
2. Parker, G. G., Van Alstyne, M. W., & Choudary, S. P. 2016. Platform Revolution: How Networked Markets are Transforming the Economy and How to Make Them Work for you. WW. Norton, and Company.
3. Rahman, K. S., & Thelen, K. 2019. The Rise of the Platform Business Model and the Transformation of twenty-first Century Capitalism. Politics and Society, 47(2), 177–204.
4. Choudary, S. P. 2021. Platform scale: For A Post-Pandemic world. London: Penguin Random House India Private Limited.

Course Code	Course Name	L	T	P	C
2432MG1652	SOCIETY, ETHICS AND ANALYTICS	3	0	0	3

1. PREAMBLE

In an era where data-driven technologies shape decisions across industries and societies, ethical literacy in analytics is more critical than ever. This course explores the intersection of ethics, data analytics, and societal impact, equipping students with the frameworks to navigate complex moral dilemmas in digital environments.

2. PREREQUISITE

Basic knowledge of Information Technology.

3. LINKS TO OTHER COURSES

Functional electives & Projects.

4. COURSE EDUCATIONAL OBJECTIVES

Through this course the students will be able to;

1. To understand the ethical, social, and political dimensions of information systems and analytics.
2. To analyze ethical challenges in data collection, storage, and anonymization.
3. To evaluate issues of fairness, bias, and transparency in data analysis and interpretation.
4. To assess the societal impact of data-driven decision-making across economic, political, and cultural domains.
5. To explore principles and risks associated with responsible AI and emerging technologies.

5. COURSE OUTCOMES

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

Cos	Course Outcomes	Level of Learning domain (Based on Revised Bloom's)
C01	Explain the ethical, social, and political dimensions of information systems and analytics.	K2
C02	Examine ethical challenges in data collection, storage, and anonymization.	K4
C03	Identify the issues of fairness, bias, and transparency in data analysis and interpretation.	K3
C04	Apply the societal impact of data-driven decision-making across economic, political, and cultural domains.	K3
C05	Interpret the principles and risks associated with responsible AI and emerging technologies.	K2

6. CORRELATION OF CO'S WITH PO'S

CO Nos.	P01	P02	P03	P04	P05	P06	P07
C01		H		H	M		H
C02	M	H		H			
C03	M	H	M	H			
C04		H		H		M	H
C05			M	H	M	M	H

H- High; M-Medium; L-Low

7, COURSE CONTENTS

UNIT I: INTRODUCTION TO ETHICS, ANALYTICS, AND SOCIETY

L-9

Evolution of Information Systems and Ethical, Social and Political issues - Technology trends and ethical issues - Nonobvious relationship awareness (NORA) - Concepts: Responsibility, Accountability, Liability - Overview of ethics: definition, principles, and theories - Ethics in the context of data analytics: importance and challenges - Social impact of analytics: opportunities and risks - Ethical decision-making models and frameworks

UNIT II: ETHICAL CHALLENGES IN DATA COLLECTION

L-9

Data collection methods: types, sources, and implications - Privacy, consent, and data protection - Ethical considerations in data acquisition and storage - Ethical issues in data anonymisation and de-identification

UNIT III: ETHICAL CHALLENGES IN ANALYSIS AND INTERPRETATION

L-9

Ethical Issues in Data Analysis and Interpretation - Data integrity, accuracy, and quality - Algorithmic transparency, fairness, and bias: Value-laden Biases in Data Analytics- Ethical Theories and Data Analytics Concepts: Privacy, Shared Responsibility, Surveillance, Fairness, Discrimination, Transparency, Accountability - Gamification, Manipulation and Data Analytics - Ethical implications of predictive analytics and profiling - Social and cultural biases in data analysis

UNIT IV: SOCIAL IMPACT OF DATA ANALYTICS

L-9

Data-driven decision-making and its consequences - Ethical implications for individuals, communities, and institutions - Economic, political, and social dimensions of data analytics -

UNIT V: RESPONSIBLE AI:

L-9

Principles, Facial recognition technology (FRT): Categorization, Design-based and Rights-based Risks, Regulations - Ethics in AI and automation - Role of Government - Role of Individual and Organizations

TOTAL: 45 HOURS

8. TEXT BOOK

1. Noble, S. U. 2018. Algorithms of Oppression: How Search Engines Reinforce Racism (Illustrated edition). New York University Press.

9. REFERENCE BOOKS

1. Davis, K. 2012. Ethics of Big Data: Balancing Risk and Innovation (1st edition). O'Reilly Media.
2. Eubanks, V. 2018. Automating Inequality. St. Martin's Press.
3. Nissenbaum, H. 2009. Privacy in Context: Technology, Policy, and the Integrity of Social Life (1st edition). Stanford Law Books.
4. O'Neil, C. 2016. Weapons of Math Destruction: How Big Data Increases Inequality and Threatens Democracy. Crown.
5. Schneier, B. 2016. Data and Goliath – The Hidden Battles to Collect Your Data and Control Your World (Reprint edition). W. W. Norton & Company.
6. Singer, P. 2016. Ethics in the Real World – 82 Brief Essays on Things That Matter. Princeton University Press.
7. Wachter-Boettcher, S. 2017. Technically Wrong – Sexist Apps, Biased Algorithms, and Other Threats of Toxic Tech: Why Digital Products Are Designed to Fail You (1st edition). W. W. Norton & Company.

LOGISTICS AND SHIPPING MANAGEMENT

Sl. No.	Course Code	Course Name	L	T	P	C
1	2432MG1653	Export and Import Management	3	0	0	3
2	2432MG1654	Supply Chain Analytics	3	0	0	3
3	2432MG1655	Sustainable Logistics and Green Shipping	3	0	0	3
4	2432MG1656	Lean Management	3	0	0	3

Course Code	Course Name	L	T	P	C
2432MG1653	EXPORT AND IMPORT MANAGEMENT	3	0	0	3

1. PREAMBLE

The course on *Export and Import Management* provides students with comprehensive knowledge of the international trade system, including export–import procedures, documentation, policies, finance, logistics, and emerging global trends. It emphasizes the operational and strategic aspects of global trade management and prepares students to handle real-world export and import activities efficiently, aligning with India’s EXIM policy and international business standards.

2. PREREQUISITE

Basic knowledge of International Business or Marketing Management is recommended.

3. LINKS TO OTHER COURSES

International Business, Foreign Exchange Management, International Marketing, and Logistics and Supply Chain Management.

4. COURSE EDUCATIONAL OBJECTIVES (CEOS)

Through this course, students will be able to: –

1. Provide foundational understanding of the structure, policies, and procedures governing international trade.
2. Develop the ability to handle export–import documentation, customs regulations, and compliance mechanisms.
3. Analyze the role of finance, logistics, and risk management in export and import operations.
4. Formulate export marketing strategies and international market entry plans.
5. Evaluate the impact of digitalization, sustainability, and emerging trends in export–import management.

5. COURSE OUTCOMES (COS)

CO No.	Course Outcome	Level of Learning Domain (Based on Revised Bloom’s)
CO1	Explain the structure, importance, and policy framework of international trade.	K2
CO2	Apply knowledge of export–import procedures, documentation, and compliance requirements.	K3
CO3	Plan logistics, customs, and financial systems involved in trade operations.	K3
CO4	Examine export marketing, pricing, and risk management strategies.	K4
CO5	Analyze emerging trends such as digital trade, sustainability, and trade facilitation initiatives.	K4

6. CORRELATION OF CO’S WITH PO’S

CO Nos.	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	H	-	-	H	-	-	H
CO2	H	-	-	H	-	H	H
CO3	H	H	-	H	H	H	H
CO4	H	H	M	H	H	H	H
CO5	H	H	M	H	H	H	H

H–High, M–Medium, L–Low

7. COURSE CONTENTS

UNIT I: INTRODUCTION TO INTERNATIONAL TRADE AND EXIM ENVIRONMENT L-9

Definition, nature, and scope of international trade – Difference between domestic and foreign trade – Globalization and liberalization of trade – India's foreign trade policy framework –CONCOR- Institutional support for exports and imports: DGFT, EPCs, EXIM Bank, ECGC, WTO – Trade agreements: WTO, FTAs, RTAs – India's trade performance and competitiveness-ICEGATE-AEO-EPR-DPD-NonDPD-Shipping ISO Standards

UNIT II: EXPORT PROCEDURES AND DOCUMENTATION L-9

Export process: registration, IEC code, product selection – Export order and confirmation – Export documentation: invoice, packing list, shipping bill, certificate of origin, bill of lading, inspection, Marine insurance – INCOTERMS and export pricing – Pre-shipment and post-shipment formalities – Customs clearance – Role of freight forwarders, shipping liner, Consolidator and logistics providers-Letter of Credit-Custom Housing Agent(CHA).

UNIT III: IMPORT PROCEDURES, CUSTOMS AND LOGISTICS MANAGEMENT L-9

Import licensing and regulation – Customs Act- Import documentation: bill of entry, insurance certificate, warehouse receipt – Customs valuation and clearance procedures – Tariff and non-tariff barriers – Import financing, letters of credit, and payment terms – Role of ports, ICDs, and SEZs in import logistics – Supply chain coordination in import operations-HS code-Duty Calculation-Cargo Types-DG Classification-Vessel Tracking.

UNIT IV: EXPORT MARKETING, FINANCE AND RISK MANAGEMENT L-9

International market entry strategies – Export marketing mix and promotion – Export costing and pricing methods – Export incentives and financial assistance – Export credit and finance through EXIM Bank, ECGC, and commercial banks – Letter of Credit (LC) mechanism – Types of export-import risks and their management through insurance and hedging-Forex.

UNIT V: EMERGING TRENDS IN EXPORT AND IMPORT MANAGEMENT L-9

Digital trade facilitation and e-commerce – SWIFT systems – Blockchain applications in trade documentation – Sustainability and green logistics – Global supply chain disruptions – Trade policy reforms, RoDTEP, and PLI schemes – Future of India's export-import management and global competitiveness-Geo Politics-Global Sourcing-Digital Platforms.

TOTAL: 45 HOURS

8. TEXT BOOKS

1. B.S. Rathor and J.S.S. Jain, "Export Import Management", Himalaya Publishing House, 2018.
2. Justin Paul and Rajiv Aserkar, "Export-Import Management", Oxford University Press, 3rd Edition, 2020.

9. REFERENCE BOOKS

1. Khushpat S. Jain, "Export Import Procedures and Documentation", Himalaya Publishing House, 2016.
2. M. Govindarajan, "International Trade and Export Management", Tata McGraw-Hill Education, 2018.
3. R.L. Varshney and B. Bhattacharya, "International Marketing Management: An Indian Perspective", Sultan Chand & Sons, 2019.
4. John D. Daniels, Lee H. Radebaugh and Daniel P. Sullivan, "International Business: Environments and Operations", Pearson Education, 16th Edition, 2019.

Course Code	Course Name	L	T	P	C
2432MG1654	SUPPLY CHAIN ANALYTICS	3	0	0	3

1. PREAMBLE

The course on *Supply Chain Analytics* provides an in-depth understanding of analytical tools, techniques, and frameworks used to optimize supply chain performance. It integrates data-driven decision-making with logistics, operations, and inventory management to improve efficiency, reduce costs, and enhance customer satisfaction. Emphasis is placed on descriptive, predictive, and prescriptive analytics within the supply chain context, preparing students to apply analytical models using real-world data.

2. PREREQUISITE

Basic knowledge of Operations Management and Supply Chain Management is recommended.

3. LINKS TO OTHER COURSES

Operations Research, Business Analytics, Logistics Management, and Supply Chain Management.

4. COURSE EDUCATIONAL OBJECTIVES (CEOS)

Through this course, students will be able: –

1. To provide foundational knowledge of analytics and its role in supply chain decision-making.
2. To develop the ability to collect, analyze, and interpret supply chain data for performance improvement.
3. To apply analytical models and tools for forecasting, inventory, transportation, and network design.
4. To evaluate optimization techniques and simulation methods for complex supply chain systems.
5. To assess emerging trends in digital supply chains, big data, and AI-driven analytics.

5. COURSE OUTCOMES (COS)

CO No.	Course Outcome	Level of Learning Domain (Based on Revised Bloom's)
CO1	Outline the role and scope of analytics in modern supply chain systems.	K2
CO2	Plan analytical tools for demand forecasting, inventory, and logistics decisions.	K3
CO3	Apply data to optimize supply chain operations using quantitative methods.	K3
CO4	Develop decision-support models and optimization techniques for supply chain performance.	K3
CO5	Analyze the impact of digitalization, AI, and sustainability in supply chain analytics.	K4

6. CORRELATION OF CO'S WITH PO'S

CO Nos.	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	H	-	-	H	-	-	-
CO2	H	H	-	-	-	H	-
CO3	H	H	-	H	M	H	-
CO4	H	H	M	-	H	H	-
CO5	-	H	M	H	-	H	L

H–High, M–Medium, L–Low

7. COURSE CONTENTS

UNIT I: INTRODUCTION TO SUPPLY CHAIN ANALYTICS

L-9

Concept and scope of supply chain analytics – Types of analytics: descriptive, diagnostic, predictive, and prescriptive – Role of analytics in supply chain decision-making – Data sources and data quality – Supply chain performance metrics (KPIs) – Overview of analytical tools and software (Excel, Power BI, Python, R, Tableau) – Case studies on analytical decision-making in supply chains.

UNIT II: DEMAND FORECASTING AND INVENTORY ANALYTICS

L-9

Demand forecasting techniques: moving averages, exponential smoothing, regression – Forecast error analysis – Inventory classification and control (ABC, VED) – EOQ and safety stock analytics – Multi-echelon inventory optimization – Vendor Managed Inventory (VMI) analytics – inventory decision-making using data models.

UNIT III: LOGISTICS AND TRANSPORTATION ANALYTICS

L-9

Analytical approaches to transportation and distribution management – Network design and route optimization – Facility location analysis – Transportation cost modeling – Fleet management and vehicle routing – Simulation in logistics decision-making – Data visualization and performance dashboards for logistics.

UNIT IV: OPTIMIZATION AND DECISION MODELING IN SUPPLY CHAINS

L-9

Linear and integer programming applications – Network flow models – Supply-demand balancing – Resource allocation and scheduling – Simulation and scenario analysis – Optimization using Solver and other analytical tools – Sensitivity analysis and what-if modeling.

UNIT V: ADVANCED AND EMERGING TRENDS IN SUPPLY CHAIN ANALYTICS

L-9

Big data analytics in supply chains – Internet of Things (IoT) and real-time data – Artificial Intelligence and Machine Learning applications – Blockchain in supply chain transparency – Sustainable and green analytics – Risk analytics and resilience modeling – Case studies of digital transformation in supply chains.

TOTAL: 45 HOURS

8. TEXT BOOKS

1. Mark F. Watson, "Supply Chain Analytics", FT Press Operations Management Series, Pearson Education, 2019.
2. B.S. Sahay, "Supply Chain Management and Analytics", McGraw-Hill Education, 2nd Edition, 2021.

9. REFERENCE BOOKS

1. Sunil Chopra and Peter Meindl, "Supply Chain Management: Strategy, Planning and Operation", Pearson Education, 7th Edition, 2022.
2. F. Robert Jacobs and Richard B. Chase, "Operations and Supply Chain Management", McGraw-Hill Education, 16th Edition, 2021.
3. Hokey Min, "Analytics for Supply Chain Management: Concepts and Applications", McGraw-Hill Education, 2016.
4. David Simchi-Levi, Philip Kaminsky and Edith Simchi-Levi, "Designing and Managing the Supply Chain", McGraw-Hill Education, 4th Edition, 2019.

Course Code	Course Name	L	T	P	C
2432MG1655	SUSTAINABLE LOGISTICS AND GREEN SHIPPING	3	0	0	3

1. PREAMBLE

The course on *Sustainable Logistics and Green Shipping* provides a comprehensive understanding of environmentally responsible logistics and maritime transport practices. It focuses on the integration of sustainability principles, energy efficiency, carbon management, and green technologies into global logistics and shipping systems. The course highlights the importance of sustainable transport policies, green port initiatives, and circular economy approaches in achieving long-term environmental and economic goals.

2. PREREQUISITE

Basic knowledge of Logistics and Supply Chain Management is recommended.

3. LINKS TO OTHER COURSES

Port Management and Operations, Supply Chain Management, Shipping and Maritime Economics, Sustainable Development, and Environmental Management.

4. COURSE EDUCATIONAL OBJECTIVES (CEOS)

Through this course, students will be able: –

1. To understand the concept and importance of sustainability in logistics and shipping operations.
2. To analyze sustainable transportation systems and the role of green logistics in global trade.
3. To evaluate environmental impacts and develop strategies for emission reduction and waste minimization.
4. To apply frameworks and technologies for sustainable shipping and port management.
5. To assess global best practices and policies promoting sustainable logistics and maritime operations.

5. COURSE OUTCOMES (COS)

CO No.	Course Outcome	Level of Learning Domain (Based on Revised Bloom's)
CO1	Interpret the principles and importance of sustainability in logistics and shipping.	K2
CO2	Plan sustainable practices in transport, warehousing, and maritime operations.	K3
CO3	Apply environmental impacts, carbon footprints, and energy efficiency measures.	K3
CO4	Identify green technologies, policy frameworks, and digital tools for sustainability.	K3
CO5	Examine global trends, regulations, and innovations in sustainable logistics and shipping.	K4

6. CORRELATION OF CO'S WITH PO'S

CO Nos.	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	H	-	H	H	-	-	-
CO2	H	H	H	-	M	-	-
CO3	H	H	-	-	M	M	-
CO4	-	H	-	H	-	M	-
CO5	-	-	H	H	-	-	L

H-High, M-Medium, L-Low

7. COURSE CONTENTS

UNIT I: INTRODUCTION TO SUSTAINABLE LOGISTICS AND GREEN SHIPPING

L-9

Concept of sustainability and green logistics – The triple bottom line: economic, environmental, and social dimensions – Global environmental challenges in logistics and shipping – Evolution of green supply chains – Framework for sustainable transport and shipping – International Maritime Organization (IMO) and sustainability goals – Stakeholder roles and responsibilities-SDG Goals.

UNIT II: SUSTAINABLE TRANSPORT SYSTEMS AND GREEN SUPPLY CHAIN PRACTICES

L-9

Design and management of sustainable transport systems – Modal shift and intermodal solutions – Urban logistics and last-mile sustainability – Reverse logistics and circular economy – Waste minimization and recycling in supply chains – Green procurement and packaging – Sustainable fleet management and logistics infrastructure planning.

UNIT III: ENVIRONMENTAL IMPACT AND EMISSION CONTROL IN SHIPPING AND LOGISTICS

L-9

Sources of emissions in logistics and maritime operations – Carbon footprint measurement and management -Life Cycle Assessment (LCA) – Energy efficiency in transportation and port operations – Alternative fuels (LNG, biofuels, hydrogen) – IMO MARPOL regulations – Pollution prevention and waste management in ports and ships.

UNIT IV: GREEN TECHNOLOGIES, DIGITALIZATION AND POLICY FRAMEWORKS

L-9

Digitalization in sustainable logistics: IoT, blockchain, AI, and data analytics – Smart ports and smart shipping technologies – Green port initiatives and certification standards – Sustainable Maritime Transport Policy – ISO 14001 and EMS adoption – Energy-efficient ship design – International frameworks: IMO 2023 GHG strategy, EU Green Deal, and India's National Logistics Policy-HSC Certification.

UNIT V: EMERGING TRENDS AND GLOBAL BEST PRACTICES IN SUSTAINABLE LOGISTICS AND SHIPPING

L-9

Sustainability performance metrics and benchmarking – Corporate Social Responsibility (CSR) and ESG goals – Green finance and carbon credits – Case studies of sustainable ports and shipping lines (Maersk, DP World, PSA, Adani Ports) – Climate adaptation and disaster resilience – Future outlook: autonomous ships, renewable-powered transport, and decarbonization pathways.

TOTAL: 45 HOURS

8. TEXT BOOKS

1. Alan McKinnon, Sharon Cullinane, Michael Browne and Anthony Whiteing, "Green Logistics: Improving the Environmental Sustainability of Logistics", Kogan Page, 3rd Edition, 2018.
2. B.S. Sahay and Anish Sachdeva, "Green Logistics and Supply Chain Management", McGraw-Hill Education, 2nd Edition, 2020.

9. REFERENCE BOOKS

1. Paulina Golinska-Dawson, "Sustainable Logistics and Transportation", Springer, 2018.
2. Maria G. Burns, "Sustainability and Green Ports: Strategies for Port Development and Environmental Management", CRC Press, 2019.
3. Edward Sweeney, "Sustainable Supply Chains: A Research-Based Textbook on Operations and Strategy", Routledge, 2021.
4. IMO Publications, "IMO Strategy on Reduction of GHG Emissions from Ships", International Maritime Organization, 2023.

Course Code	Course Name	L	T	P	C
2432MG1656	LEAN MANAGEMENT	3	0	0	3

1. PREAMBLE

The course on *Lean Management* provides an in-depth understanding of lean philosophy, principles, tools, and techniques aimed at achieving operational excellence across industries. It emphasizes waste reduction, value creation, continuous improvement, and customer-centric performance in both manufacturing and service sectors. The course integrates theoretical foundations with real-world applications, case studies, and analytical frameworks for implementing lean systems in contemporary organizations.

2. PREREQUISITE

Basic understanding of Operations Management or Production and Service Management.

3. LINKS TO OTHER COURSES

Operations Management, Total Quality Management, Six Sigma, Supply Chain Management, Operations Analytics.

4. COURSE EDUCATIONAL OBJECTIVES (CEOS)

Through this course, students will be able to:

1. Understand the core philosophy and evolution of Lean thinking and its relevance in modern business environments.
2. Apply Lean principles, tools, and techniques to improve process efficiency and reduce waste.
3. Analyze and evaluate lean transformation initiatives using performance metrics and continuous improvement frameworks.
4. Integrate Lean with Six Sigma, digital technologies, and sustainability for strategic operations excellence.

5. COURSE OUTCOMES (COS)

CO No.	Course Outcome	Level of Learning Domain (Based on Revised Bloom's)
CO1	Explain the philosophy, evolution, and core principles of Lean Management.	K2
CO2	Identify and classify different types of waste and apply Lean tools to eliminate them.	K3
CO3	Develop process improvement plans using tools like Value Stream Mapping, 5S, Kaizen, and Kanban.	K3
CO4	Analyze the relationship between Lean, Quality, and Six Sigma for operational excellence.	K4
CO5	Examine Lean implementation strategies, challenges, and best practices in manufacturing and services.	K4

6. CORRELATION OF COS WITH POS

CO Nos.	P01	P02	P03	P04	P05	P06	P07
CO1	H	-	-	H	-	H	H
CO2	H	H	-	H	-	H	H
CO3	H	H	-	H	H	H	H
CO4	-	H	M	H	H	H	H
CO5	-	H	M	H	H	H	H

H – High, M – Medium, L – Low

7. COURSE CONTENTS

UNIT I: INTRODUCTION TO LEAN PHILOSOPHY AND EVOLUTION

L-9

Evolution of Lean Thinking – from Toyota Production System (TPS) to Lean Enterprise-Core principles: Value, Value Stream, Flow, Pull, and Perfection-Lean vs. Traditional Management Systems-Role of Leadership and Organizational Culture in Lean Transformation-Government Schemes lean MSME scheme, ZED -Case studies

UNIT II: LEAN TOOLS AND TECHNIQUES

L-9

5S and Visual Workplace- Kaizen and Continuous Improvement- Value Stream Mapping (VSM)- Standard Work and Workload Balancing- Kanban, Jidoka, and Poka-Yoke (Error Proofing)- Takt Time and Heijunka (Level Scheduling)- Waste Identification (Muda, Mura, Muri) – FMEA.

UNIT III: LEAN IN OPERATIONS AND SUPPLY CHAIN

L-9

Lean Production Systems- Lean Warehousing and Logistics- Lean Procurement and Supplier Development- Just-in-Time (JIT) and Pull Systems- Lean in Service Operations (Banking, Healthcare, IT, Education)- Lean Metrics: Cycle Time, Lead Time, OEE, Inventory Turns

UNIT IV: INTEGRATING LEAN WITH QUALITY AND SIX SIGMA

L-9

Synergy between Lean and Six Sigma- DMAIC and DMADV frameworks- Lean problem-solving tools: A3, Root Cause Analysis, 5 Whys-Process capability and control charts- Lean project selection and prioritization- Cost-benefit analysis of Lean implementation

UNIT V: SUSTAINING LEAN AND FUTURE TRENDS

L-9

Lean Leadership and Change Management- Lean Performance Measurement and KPIs-Challenges and barriers in Lean implementation- Lean in the Digital Era: Industry 4.0, IoT, AI, and Smart Manufacturing- Green Lean: sustainability and circular economy integration-Future of Lean: Resilient and Agile Operations

TOTAL: 45 HOURS

8. TEXT BOOKS

1. Das, K., & Dixon, M. (2020). *Lean Manufacturing and Service: Fundamentals, Applications and Case Studies*. CRC Press.
2. Jeffrey Liker, *The Toyota Way: 14 Management Principles from the World's Greatest Manufacturer*, McGraw-Hill, 2nd Edition, 2021.

9. REFERENCE BOOKS

1. James P. Womack and Daniel T. Jones, *Lean Thinking: Banish Waste and Create Wealth in Your Corporation*, Free Press, 3rd Edition, 2017.
2. John Bicheno and Matthias Holweg, *The Lean Toolbox: The Essential Guide to Lean Transformation*, Picsie Books, 5th Edition, 2016.
3. Michael L. George, *Lean Six Sigma: Combining Six Sigma Quality with Lean Production Speed*, McGraw-Hill, 2002.
4. Dennis P. Hobbs, *Lean Manufacturing Implementation: A Complete Execution Manual for Any Size Manufacturer*, J. Ross Publishing, 2011.
5. Pascal Dennis, *Lean Production Simplified*, CRC Press, 4th Edition, 2017.
6. Debashis Sarkar, *Lessons in Lean Management*, Sage Publications, 2008.

Course Code	Course Name	L	T	P	C
2437MG7600	PROJECT WORK	0	0	12	6

1. PREAMBLE

This course provides an awareness about the issues pertaining to the organization where the students undertake the project. They identify the problem and find out solutions which would be further incorporated in the organization for future prospects.

2. PREREQUISITE

The student could have the basic knowledge on research methodology.

3. LINKS TO OTHER COURSES

This course has links to courses like Research Methodology, Quantitative Techniques.

4. COURSE EDUCATIONAL OBJECTIVES

Through this course the students will be able: -

1. To enable the student to probe for a research problem in their field of study.
2. To make the student to carry out a survey and data collection pertaining to the problem of study.
3. To interpret the data and draw out inferences.
4. To provide suitable solutions and recommendations for the problem studies.

5. COURSE OUTCOMES

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

COs	Course Outcomes	Level of learning domain (Based on revised Bloom's)
C01	Identify a research problem pertaining to specific functional area of an organization.	K3
C02	Apply the concept of research process.	K3
C03	Create and present a systematic report of the research conducted following a rigorous research methodology.	K6
C04	Explain the means of data collection and statistical analysis	K5
C05	Develop the project report which fulfils project objectives	K5

6. CORRELATION OF CO's WITH PO's

CO Nos.	P01	P02	P03	P04	P05	P06	P07
C01	M	H		H			H
C02		H		H			H
C03		H		H			H
C04		H				M	M
C05		M	M		H	H	H

H- High, M-Medium, L-Low

7. COURSE CONTENTS

1. Identification of research problem
2. Conduct research
3. Preparation of research report
4. Collection and analysis of data
5. Final research report

Continuous assessment scheme for project work

Rview I (10 Marks)	Review II (15 Marks)	Assessment by Project Guide (15 Marks)	Total (40 marks)
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Rubrics for evaluation of Project work

Project Report Preparation (20 Marks)	Presentation (20 Marks)	Question and Answer (20 Marks)	Total (60 Marks)
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Course Code	Course Name	L	T	P	C
2437MG4600	PUBLICATION OF RESEARCH PAPER	0	0	2	1

The students shall be awarded one (1) credit if they publish a paper in any conference/seminar/journal approved by the Dean of the respective school. This course carry one credit, shall be delivered by individual student. The Head of the department shall constitute the Research Review Committee (RRC) for this course consisting of two faculty members with diversified specializations and the RRC Coordinator.

INDUSTRY LIVE PROJECT COURSES

SL. No.	Course Code	Course Title	Type	L	T	P	C
1	2432MG9600	Digital Marketing Services	PE	3	0	0	3
2	2432MG9601	Introduction to SEO and Google Ads	PE	3	0	0	3
3	2432MG9602	Mobile Marketing and Content Development	PE	3	0	0	3
4	2432MG9603	Cost Analysis and Strategic Control	PE	3	0	0	3
5	2432MG9604	Applied GST for Business Decision Making	PE	3	0	0	3
6	2432MG9605	Practical Fintech for Business and Investment	PE	3	0	0	3
7	2432MG9606	Strategic Change and Innovation	PE	3	0	0	3
8	2432MG9607	Work Place Psychology	PE	3	0	0	3
9	2432MG9608	Talent Development and Training	PE	3	0	0	3
10	2432MG9609	AI Application in Management	PE	3	0	0	3
11	2432MG9610	Managing Digital Transformation	PE	3	0	0	3
12	2432MG9611	Analytics for Strategic Decision Making	PE	3	0	0	3
13	2432MG9612	Strategic Logistics and Operations	PE	3	0	0	3
14	2432MG9613	Inventory & Facility Management	PE	3	0	0	3
15	2432MG9614	Lean Management	PE	3	0	0	3

DIGITAL MARKETING

Course Title: Digital Marketing Services

Course Code: 2432MG9600

Programme: MBA

Semester: III

Credits: 3

Prerequisites: Nil

Course Objectives

The objective of this live project course is to enable students to:

- This will introduce digital marketing fundamentals, covering services marketing, marketing funnels, and buyer personas, while exploring ChatGPT, Generative AI, and social media marketing strategies to enhance brand engagement and business growth.
- The course enables learners to create engaging content through blogs, posters, brochures, long YouTube videos, and short reels to attract, inform, and retain customers effectively.
- It develops skills in video editing and design, focusing on creating compelling thumbnails, covers, storytelling techniques, and engaging product demos and explainer videos to enhance audience engagement.
- The course equips learners with skills to manage social media effectively by creating content calendars, posting regularly, and engaging followers to build a strong online presence and community.
- This will train learners to create effective Meta ads on Facebook and Instagram, generating targeted leads, boosting brand visibility, and increasing conversions.

Course Outcomes (COs)

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

CO1: Learners will understand digital marketing fundamentals and apply AI-driven strategies to enhance brand engagement.

CO2: Analyze and create engaging written and visual content to attract, inform, and retain customers across diverse digital platforms effectively.

CO3: Apply video editing and design skills to create compelling thumbnails, storytelling content, and product demos that enhance audience engagement and brand communication.

CO4: Apply social media management skills to plan content calendars, post consistently, and engage Followers for a stronger online presence and community building.

CO5: Examine strategies for creating effective Meta ads on Facebook and Instagram to generate targeted leads, boost brand visibility, and increase conversions.

Teaching-Learning Methods

- Live Project in a selected company.
- Periodic reviews and mentoring by faculty guides.
- Field work, company interactions, and data collection.
- Preparation of project report with recommendations.

Course Content (Live Project Focused)

1. Introduction to Digital Marketing Services

- Marketing Funnel
- Buyer Persona
- Chat GPT & Gen AI
- Social media marketing

2. Content Creation to Engage Customers

- Create valuable articles for blogs
- Design posters and brochures
- Long videos to post in YouTube
- Prepare short Videos for reels

3. Video Editing & Designing

- Thumbnails & Covers
- Storytelling
- Product Demos & Explainers

4. Social Media Management

- Posts regularly in Social Media
- Engages followers
- Content Calendar creations

5. Meta Ads (FB & Insta)

- Generates targeted leads
- Boosts brand visibility
- Increases conversions

Textbooks / References

1. **Mathur, Vibha, Arora, Saloni**, "Digital Marketing" PHI Learning Pvt. Ltd. October 2020.
2. **Aleksej Heinze, Gordon Fletcher, Tahir Rashid** "Digital and Social Media Marketing: A Results- Driven Approach", Taylor & Francis, 2016.
3. **Vandana Ahuja**, "Digital Marketing", Oxford University Press, 2015.
4. **Cecilia Figueroa** "Introduction to Digital Marketing 101" BPB Publication, 6 September 2019.
5. **Charles F. Hofacker**, "Digital Marketing Communicating, Selling and Connecting", Edward Elgar Publishing, Incorporated, 2018.

Course Title: Introduction to SEO and Google Ads

Course Code: 2432MG9601

Programme: MBA

Semester: III

Credits: 3

Prerequisites: Nil

Course Objectives

- Gain website development fundamentals, including domain setup, hosting, CMS, and WordPress customization tools.
- Examine keyword research techniques and analyse search volume for effective SEO and ad targeting.
- Learn to implement and audit on-page SEO, including page analysis, internal/external links, and keyword density.
- Understand off-page SEO strategies, including guest posting and backlink building, to enhance website authority.
- Develop a Google Ads campaign setup, including search, display, video, shopping, and integration with Google Analytics.

Course Outcomes (COs)

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

- Create functional websites using WordPress themes, plugins, and page builders for effective online presence.
- Examine keyword research methods to identify high-performing keywords and improve search visibility.
- Analyze on-page SEO techniques to optimize website pages for better search engine rankings and visibility.
- Apply off-page SEO techniques to improve website credibility, search rankings, and online visibility effectively.
- Create and manage Google Ads campaigns effectively, optimizing performance using analytics across multiple ad formats.

Teaching-Learning Methods

- Live Project in a selected company.
- Periodic reviews and mentoring by faculty guides.
- Field work, company interactions, and data collection.
- Preparation of project report with recommendations.

Course Content (Live Project Focused)

Introduction to SEO and Google Ads

1: Website Development

- Website Creation
- Domain, Hosting, CMS,
- WordPress themes, plugins and page builder

2. Keywords

- Keyword research
- Keyword Search Volume

3: On-Page SEO

- Install ON PAGE SEO
- Audit On-Page SEO (Page in for, Diagnosis, internal, external, density)

4. Off-Page SEO

- Guest post,
- Backlinks,

5: Google Ads campaign

- Google Ads Campaign structure
- Search, Display, Video, Shopping
- Google Analytics

Text Book / Reference Books

1. Subhankar Das, "Search Engine Optimization and Marketing", CRC Press, 2021.
2. Jerri L. Ledford, "SEO: Search Engine Optimization Bible", Wiley, 2015.
3. Eric Enge, Stephan Spencer, Rand Fishkin, Jessie Stricchiola, "The Art of SEO"-" O'Reilly Media" 2009
4. Prabir Rai Chaudhuri "SEO: The Complete Guide for Beginners"2022

Course Title: Mobile Marketing & Content Marketing

Course Code: 2432MG9602

Programme: MBA

Semester: III

Credits: 3

Prerequisites: Nil

Course Objectives

- Develop skills to design short-form mobile ads and create engaging videos using Google VE03.
- Learn to research audiences, create engaging email content, and design effective email marketing campaigns.
- Understand WhatsApp marketing fundamentals, including business setup, social media integration, and product catalogue creation.
- Learn effective mobile marketing strategies using social media platforms like Facebook, Instagram, and YouTube.
- Develop understanding of mobile analytics, engagement metrics, and conversion tracking using Google Analytics 4.

Course Outcomes (COs)

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

CO1: Apply creative techniques to produce compelling short-form mobile videos and visually appealing ad content effectively.

CO2: Analyze email marketing strategies to design, execute, and analyze targeted campaigns for improved engagement.

CO3: Apply WhatsApp marketing techniques to optimize business profiles, integrate platforms, and showcase products effectively

CO4: Apply social media marketing techniques on mobile platforms to enhance brand visibility and audience engagement.

CO5: Analyze mobile marketing performance through GA4 to optimize engagement, conversion paths, and campaign effectiveness.

Teaching-Learning Methods

- Live Project in a selected company.
- Periodic reviews and mentoring by faculty guides.
- Field work, company interactions, and data collection.
- Preparation of project report with recommendations.

Course Content (Live Project Focused)

Mobile Marketing & Content Marketing

1: Content Development for Mobile Platforms

- Design short-form content for mobile ad design.
- Video Creation with Google VEO3
- Create short videos (Reels, Stories)

2: E-Mail Marketing

- Market Research & Audience Identification
- Email Content Creation & Design.
- Email Campaign

3: WhatsApp Marketing

- Business Profile Setup
- Social Media Integration in WhatsApp
- Product Catalogue Creation: Content Distribution Channels

4: Social media on mobile

- Social media platforms:
- Facebook
- Instagram,
- YouTube

5: Analytics & Performance Measurement

- Tracking using Google Analytics 4
- Visitor engagement metrics (bounce rate, session duration).
- Mobile conversion paths (inquiry form submissions, call-to-actions).

Text Book / Reference Books

- **Joe Pulizzi, Epic**, Content Marketing: How to Tell a Different Story, Break Through the Clutter, and Win More Customers by Marketing Less, McGraw-Hill LLC", 2015.
- **Kaufman, Ira and Chris Horton**, "Digital Marketing: Integrating Strategy and Tactics with Values", New York, Routledge, 2014.

FINANCE

Course Title: Cost Analysis and Strategic Control

Course Code: 2432MG9603

Programme: MBA

Semester: III

Credits: 3

Prerequisites: Nil

Course Objectives

The objective of this live project course is to enable students to:

- Apply accounting principles to understand and improve cost optimization and cost effectiveness in real-time industry settings.
- Gain hands-on exposure to cost related aspects of strategic decision-making in areas such as material, labour and overheads.
- Analyze and evaluate existing cost volume profit analysing practices in companies (e.g., inventory management through ABC analysis in MSMEs).
- Develop consultancy-oriented cost related decision making applications.
- Document and present cost based assessments and cost reduction strategies in a professional format aligned with academic standards and industry expectations.

Course Outcomes (COs)

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

CO1: Demonstrate practical understanding of structure of the cost sheet.

CO2: Critically Analyze cost volume profit of the company on the basis of marginal costing.

CO3: Apply theoretical frameworks of cost reduction measures(e.g., identification of cost centre, CVP analysis, marginal and standard costing.) to address organizational issues.

CO4: Prepare professional reports and effectively present cost management findings and recommendations to both academic and industry stakeholders.

Teaching-Learning Methods

- Live Project in selected company.
- Periodic reviews and mentoring by faculty guides.
- Field work, company interactions, and data collection.
- Preparation of project report with recommendations.

Course Content (Live Project Focused)

1. Cost related data collection

- Profit and loss account statement
- Balance sheet
- Existing cost analysis sheets.

2. Cost sheet preparation for the company.

- Identify the cost related ledgers account through tally
- Classification of cost related ledgers
- Structure of the cost sheet.
- ABC analysis

3. **Cost-Volume-Profit (CVP) Analysis based on marginal costing**

- Contribution
- Profit / Volume ratio
- Break even analysis
- Profit planning.
- Target sales planning
- Margin of safety.

4. **Decision-Making Applications**

- Impact of price changes on profit
- Impact of cost changes (fixed or variable)
- Impact of sales volume change

5. **Key Performance Indicators (KPIs)**

- Financial KPIs - Gross profit margin, net profit margin, return on investment, cost per unit, cash flows.
- Measure operational profitability, overall profitability, capital efficiency, cost efficiency / pricing, liquidity.

Textbooks / References

1. Maheswari S.N., "Cost accounting ", Tata Mc Graw Hill Co. 2016.
2. Khan M.Y. and Jain P.K., "Cost and Management Accounting problem and cases" Tata Mc Graw Hill, 2013.
3. Andreas Taschner, Michel Charifzadeh, "Management and Cost Accounting", Margham publications Pvt. Ltd., 2015.
4. Khan M.Y., "Cost Accounting' Mc Graw Hill India, 2014.
5. ZVI Bodie and others, "Investments, Special Indian" Tata McGraw Hill, 2017.
6. Bhalla V.K., "Investment Management", S. Chand & Company Ltd., 2012

Programme: MBA

Semester: III

Credits: 3

Prerequisites: Nil

Course Objectives

The objective of this live project course is to enable students to:

- Understand the basics of GST in pragmatic perspective
- Comprehend the registration process of GST.
- Analyse the eligibility criteria of applying GST and the required documents such as business registration / incorporation certificate.
- Analyse the different types of returns and the filing of returns.
- Understand the invoicing process and e-way bills.

Course Outcomes (COs)

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

CO1: Demonstrate the basic terminologies of GST.

CO2: Understand the registration process.

CO3: Apply the eligibility criteria for their respective companies.

CO4: Prepare various types of returns and filing the same.

Teaching-Learning Methods

- Live Project in selected company.
- Periodic reviews and mentoring by faculty guides.
- Field work, company interactions, and data collection.
- Preparation of project report with recommendations.

Course Content (Live Project Focused)

1. Analysing Structure of GST in India: CGST, SGST, IGST.

- **Central Goods and services tax**
- **State goods and services tax**
- **Integrated goods and services tax.**

2. Registration process.

- Who should register.
- Steps involved in the registration process.

3. Eligibility criteria and documents requirements.

- Eligibility - Businesses exceeding turnover thresholds, Interstate suppliers, E-commerce operators, Casual taxable persons and non-resident taxable persons, Agents and input service distributors.

- Documentation Required – PAN card of applicant, Aadhaar card, Proof of business registration/incorporation certificate, Address proof of business premises (rent agreement, electricity bill, NOC, etc.), Bank account proof (cancelled cheque/passbook), Photograph of proprietor/partners/directors, Digital signature (DSC) for companies/LLPs.

4. Filing Returns

- **Types of returns:**
 - a. **GSTR-1** → Details of outward supplies (monthly/quarterly).
 - b. **GSTR-3B** → Summary return with tax payment (monthly).
 - c. **GSTR-9/9C** → Annual return and reconciliation.
 - d. **Other returns** (GSTR-2A, 2B, 4, 7, 8) as applicable.
- **Compliance:**
 - a. Returns must be filed even with NIL turnover.
 - b. Late filing attracts late fees + interest.

5. Invoicing, e-way bills and digital compliance.

- Invoicing - mandatory fields in GST invoice, special cases.
- e-way bills - when required, when generated, details required, validity. Digital compliance

Textbooks / References

1. Goods and Services Tax (G.S.T) by Dr. H.C. Mehrotra and Prof. V.P. Agarwal Publication Year: 2022 (10th Edition)
2. Taxmann's Students' Guide to Income Tax & GST | Problems & Solutions by Dr. Vinod K. Singhania and Dr. Monica Singhania Publication Year: 2025–26 (31st Edition)
3. Goods and Services Tax (G.S.T.) (June 2020): Authored by Dr. H.C. Mehrotra and Prof. V.P. Agarwal,
4. Basic to Advanced GST Law (7th Edition, January 2023): Written by CS Kaushal Kumar Agrawal.

Course Title: Practical FinTech for business and Investment

Course Code: 2432MG9602

Programme: MBA

Semester: III

Credits: 3

Prerequisites: Nil

Course Objectives

The objective of this live project course is to enable students to:

- Observe the foundations of digital payments.
- Analyse the options of building digital infrastructure.
- Integrate the digital infrastructure with digital payments.
- Examine the security and compliance.
- Enhance the ways of monitoring and improving the system.

Course Outcomes (COs)

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

CO1: Demonstrate the basic terminologies of digital payment and Fintech.

CO2: Understand the creation of digital infrastructure.

CO3: Apply the ways of linking the digital payments with commercial documents of the company.

CO4: analyse the credit worthiness of the company.

Teaching-Learning Methods

- Live Project in selected company.
- Periodic reviews and mentoring by faculty guides.
- Field work, company interactions, and data collection.
- Preparation of project report with recommendations.

Course Content (Live Project Focused)

1. Analysing the digital payments in Companies

- **What is digital payments, merits of digital payments.**
- **Companies response to adhere to digital payments systems.**

2. Set up digital infrastructure.

- Analyse the banking opportunities that support digital transactions.
- Enabling mobile wallet or payment gateway accounts.

3. Integration with commercial documents.

- Linking digital payments with invoices and receipts.
- Adding digital payments options on website

4. Credit worthiness of the company

- Understanding the credit needs.
- Building financial records.

- Identifying the credit worthiness of the company.

5. Data based decisions.

- Data collection
- Data analysis

Textbooks / References

1. Fintech in a Flash: Financial Technology Made Easy (2024).
2. Crash Course Financial Technology (2019). Akdeniz.
3. The Future and FinTech: ABCDI and Beyond (2022). by Jun Xu.
4. Global Fintech Revolution: Practice, Policy, and Regulation by Lerong Lu (2024).

HUMAN RESOURCE

Course Title: Strategic Change and Innovation

Course Code: 2432MG9606

Programme: MBA

Semester: III / IV

Credits: 3

Prerequisites: Knowledge of Strategic Management and Organizational Behaviour

Course Objectives

The objective of this course is to enable students to:

- Understand the theories, models, and processes of strategic change in organizations.
- Analyze the drivers and barriers of organizational change.
- Develop strategies for leading innovation and transformation.
- Apply frameworks for managing resistance, communication, and stakeholder engagement.
- Gain exposure to case studies of successful and failed change and innovation initiatives.

Course Outcomes (COs)

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

- **CO1:** Explain the concepts and importance of strategic change and innovation.
- **CO2:** Analyse organizational environments and diagnose change needs.
- **CO3:** Apply models of change management (Lewin, Kotter, ADKAR, etc.) to business contexts.
- **CO4:** Develop strategies for fostering innovation and sustaining competitive advantage.
- **CO5:** Recommend effective leadership and communication approaches for managing change.

Teaching-Learning Methods

- Case study analysis of organizational change and innovation practices.
- Group discussions and role plays on change scenarios.
- Guest lectures by change management and innovation consultants.
- Industry-oriented mini-projects on real change initiatives.
- Use of simulation tools and strategic foresight techniques.

Course Content

1. Organizational Change Practices

- Studying how MSMEs/companies manage resistance to change (workers, supervisors).
- Employee involvement in small process changes (ex: shift timing, role rotation).
- Change in leadership style during business expansion.
- Adoption of new HR policies (attendance system, leave policy, incentives).
- Family-run MSME succession (how next-gen leaders introduce new practices).

2. Process & Operations Innovations

- Low-cost automation in MSMEs (e.g., using simple machines instead of manual).
- Workflow redesign (layout change, Kanban boards, digital tracking).
- Green practices adopted (plastic-free packaging, waste segregation).
- Introduction of Quality Circles or Kaizen events.
- Supply chain innovations (direct supplier WhatsApp groups, digital invoicing).

3. Product & Service Innovations

- New product launches in household / FMCG / MSME sector.
- Small design changes that improve usability (eco-friendly packaging, refill packs).
- Service innovation: digital ordering system, UPI-based payments, ONDC listing.
- Bundling / unbundling of products for customer attraction.
- Reverse innovation examples (local low-cost solutions becoming mainstream)

4. Digital & Technological Change

- Digital marketing adoption (shift from pamphlets to Instagram/WhatsApp).
- Introduction of ERP/Tally/Zoho for finance & billing.
- E-commerce integration (Flipkart, Amazon, ONDC).
- Cloud-based HR tools (attendance apps, payroll apps).
- AI/Chatbot trials in MSME customer service.

5. Cultural & Strategic Shifts

- Creating a “continuous improvement culture” among employees.
- Shift from individual decision-making to team-based decision-making.
- Moving from traditional sales to omni-channel sales (offline + online).
- Employee suggestion schemes and their impact.
- Small MSMEs’ response to COVID or economic slowdown (adaptive changes).

Textbooks / References

- Kotter, J. P. – *Leading Change*.
- Tushman, M. L. & O’Reilly, C. A. – *Winning Through Innovation*.
- Christensen, C. M. – *The Innovator’s Dilemma*.
- Burnes, B. – *Managing Change*.
- Case studies, Harvard Business Review articles, and industry reports.

Course Title: Workplace Psychology

Course Code: 2432MG9607

Programme: MBA

Semester: III

Credits: 3

Prerequisites: Nil

Course Objectives

The objective of this live project course is to enable students to:

- Apply psychological principles to understand and improve workplace behaviour and organizational dynamics in real-time industry settings.
- Gain hands-on exposure to psychological aspects of strategic decision-making in areas such as team management, motivation, conflict resolution, and organizational change.
- Analyze and evaluate existing workplace practices in companies (e.g., employee engagement leadership styles in MSMEs).
- Develop consultancy-oriented problem-solving skills by addressing psychological challenges in field-based organizational projects.
- Document and present psychological assessments and intervention strategies in a professional format aligned with academic standards and industry expectations.

Course Outcomes (COs)

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

CO1: Demonstrate practical understanding of psychological theories and concepts in real-world organizational settings.

CO2: Critically Analyze workplace behaviour and mental health challenges, and recommend evidence-based psychological interventions.

CO3: Apply theoretical frameworks of workplace psychology (e.g., motivation, leadership, group dynamics) to address organizational issues.

CO4: Prepare professional reports and effectively present psychological findings and recommendations to both academic and industry stakeholders.

Teaching-Learning Methods

- Live Project in selected company.
- Periodic reviews and mentoring by faculty guides.
- Field work, company interactions, and data collection.
- Preparation of project report with recommendations.

Course Content (Live Project Focused)

1. Introduction to Workplace Psychology in Organizational Contexts

- Organizational structure
- organizational culture
- psychological dynamics.

- Identifying key psychological and behavioural areas for improvement.

2. Employee On boarding, Engagement, and Exit Processes

- Psychological aspects of recruitment,
- on boarding,
- induction.
- motivation,
- job satisfaction,

3. Work Environment & Psychological Well-being

- Workspace design
- environmental psychology
- ergonomics
- Stress management
- work-life balance
- mental health initiatives.

4. Organizational Strategy & Behavioural Performance Metrics

- Identifying and analysing behavioural KPIs
- Linking organizational goals with employee performance Management

5. Sustainability, Ethics & Positive Organizational Behaviour

- Promoting ethical practices,
- Promoting safety Measures (Physical and Psychological)
- Applying positive psychology and lean thinking for sustainable work culture.

Textbooks / References

1. Ghosh, P. K., & Ghorpade, M. B. (2022). *Industrial and Organizational Psychology*. New Delhi: IBP Books.
2. **Rai, H.** (2022). *Organizational Behaviour*. New Delhi, India: McGraw Hill Education.
3. **Prasad, L. M.** (2019). *Organizational Behaviour* (6th revised ed.). Delhi, India: Sultan Chand & Sons.
4. **Bhattacharyya, D. K.** (2015). *Organizational Behaviour* (2nd ed.). New Delhi, India: Oxford University Press.
5. **Prabhu, U., Haritha, M., & Naik, R. K.** (2022). *Organizational Behaviour*. New Delhi, India: Himalaya Publishing House.

Course Title: Talent Development and Training

Course Code: 2432MG9608

Programme: MBA

Semester: III

Credits: 3

Prerequisites: Knowledge of Human Resource Management and Organizational Behaviour

Course Objectives

The objective of this course is to enable students to:

- Understand the role of talent development and training in organizational growth.
- Analyze learning needs, design training programs, and evaluate effectiveness.
- Apply adult learning theories and modern training methodologies.
- Develop skills for career development, coaching, and mentoring.
- Gain exposure to digital learning, e-learning platforms, and corporate best practices.

Course Outcomes (COs)

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

CO1: Explain the concepts and significance of talent development and training.

CO2: Conduct training needs analysis (TNA) and design appropriate training programs.

CO3: Apply learning theories, instructional design, and evaluation models.

CO4: Develop strategies for career growth, leadership development, and succession planning.

CO5: Recommend innovative digital and blended learning practices in organizations.

Teaching-Learning Methods

- Case-based learning and HRD simulations.
- Role plays, workshops, and group exercises.
- Industry guest lectures and HR practitioner talks.
- Mini-projects on training program design and evaluation.
- Use of e-learning tools, LMS, and digital training platforms.

Course Content

1. Introduction to Talent Development and Training

- Types and benefits of talent development and training
- Talent development processes
- Training methods and techniques

- Latest trends in talent development and training

2. Training Needs Analysis (TNA)

- Identifying organizational, task, and individual needs
- Methods of TNA: surveys, interviews, skill gap analysis
- Prioritizing training needs and aligning with strategy

3. Training Design and Delivery

- Instructional design models (ADDIE, Kirkpatrick)
- Training methods

4. Talent Development Strategies

- Career planning and development
- Mentoring
- Workforce planning
- Learning & Development (L&D)
- Employee engagement and retention

5. Technology and Innovation in Talent Development

- Role of digital platforms in training and development
- E-learning and microlearning approaches
- Use of AI and data analytics in skill development
- Social and collaborative learning technologies
- Emerging tools and innovations in talent development

Textbooks / References

- Werner, J. M. & DeSimone, R. L. – *Human Resource Development*.
- Noe, R. A. – *Employee Training and Development*.
- Blanchard, P. N. & Thacker, J. W. – *Effective Training: Systems, Strategies, and Practices*.
- Harvard Business Review articles, case studies, and corporate reports.

BUSINESS ANALYTICS

Course Title: AI Applications in Management

Course Code: 2432MG9609

Programme: MBA

Semester: III

Credits: 3

Prerequisites: IT for Managers

Course Objectives

The objective of this live project course is to enable students to:

- Apply AI concepts to solve real-world business problems.
- Gain hands-on experience with data-driven decision-making in industry settings.
- Collaborate with partner organizations to analyze, model, and optimize business processes using AI tools.
- Develop consultancy-oriented skills in data interpretation, predictive modelling, and strategic insights.
- Present actionable recommendations through professional reports aligned with academic and industry standards.

Course Outcomes (COs)

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

- **CO1:** Demonstrate practical understanding of AI applications in business environments.
- **CO2:** Analyze organizational data to identify patterns, trends, and opportunities for innovation.
- **CO3:** Apply data mining, and visualization techniques to real-time datasets.
- **CO4:** Communicate findings effectively through structured reports and presentations to academic and industry panels.

Teaching-Learning Methods

- Live Project in selected company or organization
- Faculty mentoring and periodic reviews
- Field work, stakeholder interviews, and data acquisition
- Development of project report with strategic recommendations

Course Content (Live Project Focused)

1. **Introduction to AI in Management**
 - Company contextualization, Project scoping, Data availability.
2. **Data Acquisition and Preprocessing**
 - Data cleaning, Integration and Transformation techniques.
3. **AI Tools & Techniques**
 - ChatGPT/ AI in Excel etc.
4. **Business Intelligence & Visualizations**
 - Dashboards, storytelling with data, KPI tracking.

5. Model development

- Developing Chatbots.

Textbooks / References

- Marr, B. (2016). Big data in practice: How 45 successful companies used big data analytics to deliver extraordinary results. Wiley.
- Provost, F., & Fawcett, T. (2013). Data science for business: What you need to know about data mining and data-analytic thinking. O'Reilly Media.
- Sharda, R., Delen, D., & Turban, E. (2018). Business intelligence, analytics, and data science: A managerial perspective (4th ed.). Pearson Education.

Course Title: Managing Digital Transformation

Course Code: 2432MG9610

Programme: MBA

Semester: III

Credits: 3

Prerequisites: IT for Managers

Course Objectives

The objective of this live project course is to enable students to:

- Immerse students in real-world digital transformation initiatives across industries
- Enable experiential learning in digital strategy, process redesign, and technology adoption
- Foster critical thinking on organizational change, innovation, and stakeholder alignment
- Equip students to assess digital maturity and recommend transformation roadmaps
- Develop professional competencies in managing digital disruption and agile execution

Course Outcomes (COs)

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

- **CO1:** Analyze the digital maturity and transformation readiness of an organization
- **CO2:** Identify key drivers, barriers, and enablers of digital change
- **CO3:** Apply frameworks for digital strategy, innovation, and change management
- **CO4:** Deliver actionable insights through structured project reports and stakeholder presentations

Teaching-Learning Methods

- Live Project in selected company or organization
- Faculty mentoring and periodic reviews
- Field work, stakeholder interviews, and data acquisition
- Development of project report with strategic recommendations

Course Content (Live Project Focused)

1. **Digital Transformation Landscape**
 - Industry trends, case studies, organizational imperatives.
2. **Digital Audit & Maturity Assessment**
 - Tools for evaluating digital readiness and capability gaps.
3. **Technology Integration and Process Redesign**
 - ERP/ CRM/Cloud/ AI/ IoT/BPR and automation strategies.
4. **Change Management and Culture shift**
 - Stakeholder engagement, resistance management, agile practices.
5. **Strategic Road mapping and Execution**
 - Phased implementation, KPIs, ROI analysis.

Textbooks / References

- Westerman, G., Bonnet, D., & McAfee, A. (2014). *Leading digital: Turning technology into business transformation*. Harvard Business Review Press.
- Rogers, D. L. (2016). *The digital transformation playbook: Rethink your business for the digital age*. Columbia Business School Publishing.
- Kane, G. C., Palmer, D., Phillips, A. N., Kiron, D., & Buckley, N. (2019). *Accelerating digital innovation inside and out: Agile teams, ecosystems, and ethics*. MIT Sloan Management Review.
- Bharadwaj, A., El Sawy, O. A., Pavlou, P. A., & Venkatraman, N. (2013). *Digital business strategy: Toward a next generation of insights*. MIS Quarterly, 37(2), 471–482.

Course Title: Analytics for Strategic Decision-Making

Course Code: 2432MG9611

Programme: MBA **Semester:** III **Credits:**

Prerequisites: Basic knowledge of Statistics and Excel

Course Objectives

The objective of this course is to enable students to:

- Understand the role of business analytics in strategic decision-making.
- Apply statistical, predictive, and prescriptive analytics to real-world business problems.
- Develop skills in data-driven decision-making using tools and techniques.
- Evaluate case-based business situations and recommend evidence-based strategies.
- Enhance consultancy and problem-solving skills through hands-on applications.

Course Outcomes (COs)

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

- **CO1:** Demonstrate conceptual understanding of business analytics frameworks.
- **CO2:** Apply analytical tools for descriptive, predictive, and prescriptive decision- making.
- **CO3:** Analyse complex business scenarios using quantitative models and interpret results effectively.
- **CO4:** Recommend data-driven strategic solutions to real business problems.
- **CO5:** Present analytical findings in a professional format for academic and industry stakeholders.

Teaching-Learning Methods

- Case-based learning and industry problem analysis.
- Software-based practice (Excel, SPSS, R/Python, Power BI/Tableau).
- Mini-projects and group assignments.
- Faculty mentoring and review discussions.
- Report preparation and industry-style presentations.

Analytics for Strategic Decision-Making Course Content

1. Introduction to Analytics in Strategic Decision-Making

- Role of analytics in modern business strategy, Frameworks for data- driven decision-making, Case illustrations from different industries.

2. Descriptive Analytics for Business Insights

- Data summarization and visualization, Key Performance Indicators (KPIs), Dashboarding and reporting for decision support.

3. Predictive Analytics and Forecasting

- Regression, classification, and clustering models, Demand forecasting and customer behaviour analysis, Risk assessment using predictive models.

4. Prescriptive Analytics and Optimization

- Simulation and scenario analysis, Decision trees and optimization models for strategy.

5. Strategic Applications of Analytics

- Data-driven innovation and competitive advantage.

Textbooks / References

- Davenport, T. H. & Harris, J. G. – *Competing on Analytics: The New Science of Winning*.
- Evans, J. R. – *Business Analytics: Methods, Models, and Decisions*.
- Provost, F. & Fawcett, T. – *Data Science for Business*.
- Case studies, company reports, and research articles.

LOGISTICS AND SHIPPING MANAGEMENT

Course Code: 2432MG9612

Programme: MBA

Semester: III

Credits: 3

Prerequisites: Nil

Course Objectives

The objective of this live project course is to enable students to:

- Apply logistics and operations concepts in real-time industry settings.
- Gain hands-on exposure to strategic decision-making in warehousing, distribution, and operations management.
- Analyse and evaluate existing logistics practices in partner companies (e.g., Flipkart DCs, MSME supply chains).
- Develop consultancy-oriented problem-solving skills through field-based projects.
- Document and present project findings in a professional format aligning with academic rigor and industry expectations.

Course Outcomes (COs)

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

CO1: Demonstrate practical understanding of logistics and operations strategies in live company settings.

CO2: Critically analyse logistics challenges and recommend feasible solutions.

CO3: Apply theoretical frameworks to real-world logistics and operations processes.

CO4: Prepare reports and present findings to both academic and industry panels.

Teaching-Learning Methods

- Live Project in selected company.
- Periodic reviews and mentoring by faculty guides.
- Field work, company interactions, and data collection.
- Preparation of project report with recommendations.

Course Content (Live Project Focused)

1. Introduction to Strategic Logistics & Operations (Company Contextualization)

- Understanding company's logistics/operations framework,
- Identifying key areas for improvement.

2. Inbound & Outbound Logistics Processes

- Vendor coordination, inbound transport, unloading, quality checks.
- Order picking, packing, dispatch, and last-mile delivery.

3. Warehousing & Facility Management

- Layout planning, storage strategies, and technology-enabled warehouse operations.

4. Operations Strategy & Performance Measurement

- KPIs, cost reduction, lead time analysis, and efficiency improvement.

5. Sustainability & Lean Practices in Operations

- Waste minimization, resource optimization, eco-friendly packaging/logistics.

6. Consultancy Report Preparation & Presentation

- Structuring findings, recommendations, and executive summary for industry.

Textbooks / References

1. Chopra, S. & Meindl, P. – *Supply Chain Management: Strategy, Planning, and Operation*.
2. Ballou, R. – *Business Logistics/Supply Chain Management*.
3. Rushton, A., Croucher, P., & Baker, P. – *The Handbook of Logistics & Distribution Management*.
4. Company reports, case studies, and research articles.

Course Title: Inventory & Facility Management

Course Code: 2432MG9613

Programme: MBA

Semester: III

Credits: 3

Prerequisites: Knowledge of Operations Management and basic Supply Chain concepts

Course Objectives

The objective of this course is to enable students to:

- Understand the principles and functions of inventory and facility management in business operations.
- Apply quantitative techniques for inventory planning, control, and optimization.
- Analyze facility layout, design, and maintenance strategies for operational efficiency.
- Develop decision-making skills in resource utilization, storage, and distribution.
- Gain exposure to industry practices in warehouse, plant, and facility management.

Course Outcomes (COs)

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

CO1: Explain the concepts and importance of inventory and facility management.

CO2: Apply inventory control techniques (EOQ, ABC, VED, JIT, etc.) in business scenarios.

CO3: Analyse facility location, layout, and capacity planning decisions.

CO4: Design strategies for efficient utilization of warehouses, plants, and office facilities.

CO5: Recommend cost-effective, safe, and sustainable practices in inventory and facility operations.

Teaching-Learning Methods

- Case-based learning and industry applications.
- Problem-solving and numerical exercises.
- Simulation and software-based analysis (Excel, ERP tools, WMS).
- Group discussions, mini-projects, and role plays.
- Industry visits and expert lectures.

Course Content

1. Introduction to Inventory & Facility Management

- Meaning, scope, and importance of inventory and facility management,
- Role in supply chain and organizational performance,
- Industry illustrations.

2. Inventory Control Systems and Techniques

- Types of inventories – raw material, WIP, finished goods, spares,
- EOQ, ABC, VED, FSN, SDE analysis,
- Safety stock, reorder level, and service level,
- Just-in-Time (JIT) and Lean inventory practices.

3. Facility Location & Layout Planning

- Factors influencing facility location,
- Facility layout – process, product, cellular, and hybrid layouts,
- Capacity planning, space utilization, and workflow efficiency.

4. Facility Operations & Maintenance

- Building services – HVAC, lighting, energy, water, safety systems,
- Preventive and predictive maintenance,
- Asset management, cost control, and compliance,
- Sustainable facility management (Green Buildings, ISO standards).

5. Strategic Applications in Inventory & Facility Management

- Warehouse and distribution center management,
- Inventory management in retail, e-commerce, and manufacturing,
- Facility management outsourcing and technology (IoT, RFID, CMMS),
- Case studies of leading companies.

Textbooks / References

- Richards, G. – *Warehouse Management: A Complete Guide to Improving Efficiency and Minimizing Costs*.
- Arnold, J. R. T., Chapman, S. N., & Clive, L. M. – *Introduction to Materials Management*.
- Tompkins, J. A. & White, J. A. – *Facilities Planning*.
- Case studies, industry reports, and research articles.

Course Title: Lean Management

Course Code: 2432MG9614

Programme: MBA

Semester: III / IV

Credits: 3

Prerequisites: Knowledge of Operations Management and basic Production/Service Systems

Course Objectives

The objective of this course is to enable students to:

- Understand the philosophy, principles, and tools of Lean Management.
- Apply Lean methods to reduce waste, improve quality, and enhance efficiency.
- Analyze value streams and redesign processes for continuous improvement.
- Develop managerial skills for implementing Lean in manufacturing and service sectors.
- Gain exposure to industry best practices and case studies in Lean transformation.

Course Outcomes (COs)

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

CO1: Explain the foundations and philosophy of Lean Management.

CO2: Apply Lean tools and techniques (5S, Kaizen, Kanban, VSM, TPM) in business scenarios.

CO3: Analyze waste in processes and propose value-added improvements.

CO4: Design Lean strategies for manufacturing and service organizations.

CO5: Recommend sustainable continuous improvement practices in business operations.

Teaching-Learning Methods

- Case-based learning and industry examples.
- Value stream mapping exercises and simulations.
- Role play for Kaizen events and Lean projects.
- Group discussions, mini-projects, and industry benchmarking.
- Guest lectures from Lean practitioners.

Course Content

1. Introduction to Lean Management

- Philosophy and evolution of Lean – Toyota Production System (TPS),
- Core principles – value, value stream, flow, pull, perfection,
- Relevance of Lean in manufacturing and service industries.

2. Lean Tools and Techniques

- 5S, Kaizen, Poka-Yoke, Kanban, Jidoka,
- Total Productive Maintenance (TPM)
- SMED (Single Minute Exchange of Die),
- Standard Work and Visual Management.

3. Value Stream Mapping (VSM)

- Identifying value-added and non-value-added activities,
- Mapping current state and designing future state,
- Eliminating wastes (Muda, Mura, Muri),
- Case-based illustrations.

4. Lean Implementation and Change Management

- Lean project planning and execution,
- Cross-functional team roles and leadership.
- Overcoming resistance to change,
- Lean culture and employee involvement.

5. Strategic Applications and Industry Practices

- Lean in healthcare, IT services, supply chain, and retail,
- Lean Six Sigma integration.
- Digital Lean – Industry 4.0 and smart manufacturing,
- Case studies of Lean transformation in global companies.

Textbooks / References

- Womack, J. P. & Jones, D. T. – *Lean Thinking: Banish Waste and Create Wealth in Your Corporation*.
- Liker, J. K. – *The Toyota Way: 14 Management Principles from the World's Greatest Manufacturer*.
- Dennis, P. – *Lean Production Simplified*.
- Case studies, industry reports, and journal articles.

VALUE ADDED COURSES

Course Title: Innovation and Design Thinking

Course Code: 2438MG1001

Credits: 3 (or as per university policy)

Semester: Semester 1, Academic Year 2026

Course Director: Prof. Chockalingam Aravind Vaithilingam, PhD, CEngg,

Trainer (s): MADE LLP

Contact: aravindcv@ieee.org

Course Description

This course introduces MBA students to the principles and practices of human-centered innovation. It integrates design thinking, problem exploration, rapid prototyping, business modeling, and technology readiness assessment to guide students from identifying real-world problems to delivering investor-ready solutions. Through experiential learning, students will work in teams to explore user needs, develop prototypes, validate assumptions, and pitch viable business models preparing students to drive innovation in startups, enterprises, and social ventures.

Learning Outcomes

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

1. Apply human-centered design methods to identify and frame real-world business problems and produce validated problem statements.
2. Design, prototype, and test minimum viable products using rapid prototyping techniques and fidelity-appropriate tools to validate desirability and usability.
3. Construct and evaluate business models and market readiness level roadmaps that align technical maturity with funding strategies and go-to-market plans.
4. Prepare and deliver investor-ready pitch decks and fundraising strategies that demonstrate market potential, financial viability, and sustainable impact.

Course Structure (14-Week Plan) or 7 hrs/day *2 days = 14 hours + 1 hour assessment contact hours

Week	Topic	Key Activities	Deliverable
1	Introduction	Workshop overview	Ref. Journal
2	Empathy & Problem Exploration	Empathy mapping, stakeholder interviews, 5 Whys	Empathy Map
3	Framing & POV	Problem Statement	Problem Statement
4	Ideation Techniques	SCAMPER, POV framing	HMW Questions
5	Value Proposition	VPC, Value Chain Canvas	Draft VPC
6	Prototyping Mindset	Paper prototyping, A/B	Paper Prototype
7	Prototypes & MVPs	Figma/XD wireframes, MVP	Test Report
8	Validation & Hurdle 1	User testing, BMC draft	Hurdle
9	BMC	BMC 9 blocks, revenue models	BMC Final Draft
10	Readiness Levels	RL mapping, funding fit	RL Roadmap
11	Fund & Financials	Grants, equity, angels	Funding Plan
12	GTM & Sustainability	GTM strategy, IP, SDGs	GTM Plan
13	Pitch Practice	Pitch deck reviews, Q&A drills	Draft Investor Deck
14	Final Presentations	Hurdle Final Pitch	Final Pitch + Deck

Assessment

Pitching – 100% : BMC – 20%, 3-min Pitch - 30%, Final Pitch 50%

Project Brief

Objective: Take a real problem through human-centered discovery to an investor-ready pitch.

Team size: 4–5 students.

Milestones: Week 3: Problem Statement, Week 6: Prototype & VPC, Week 8: BMC Draft (Hurdle 1), Week 10: RL Map & Funding Plan, Week 12: GTM & Financials, Week 14: Final Pitch (Hurdle 3)

Teaching & Learning Activities

- Active Learning: design sprints, 6-3-5 brainwriting, SCAMPER, paper prototype sprints, neighbor testing, role-play (Wizard of Oz), stakeholder interviews.
- Labs: prototyping lab sessions (paper, digital, physical), pitch practice sessions, peer feedback rounds.

References

- Brown, T. (2009). Change by Design. HarperBusiness.
- Ries, E. (2011). The Lean Startup. Crown Business.
- Osterwalder, A., & Pigneur, Y. (2010). Business Model Generation. Wiley.
- Blank, S., & Dorf, B. (2012). The Startup Owner's Manual. K&S Ranch.

BUSINESS DATA ANALYSIS AND VISUALIZATION

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13.08.2022
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Vel Tech
Rangarajan Dr. Sagunthala
University
Rank no. 7 of UGC Act, 1956
Avadi, Chennai

Office of International Relations
IHL / Value Added Courses

Course Code	Course Title	L	T	P	C
2438MB1002	Business Data Analytics and Visualization				

COURSE CATEGORY

Value Added Course

COURSE OUTCOME:

Upon successful completion of this course, students will be able to, Apply data analytics techniques, visualization tools, and AI-based methods to analyze business data and support effective managerial decision-making and research.

COURSE CONTENT

- Introduction to Data Analytics
- N-Dimensional Data Structure
- Data Preparation
- Data quality, Linear Regression,
- Multiple regression
- Web scraping
- Introduction to Data Visualisation
- Hands-on practice of different visualisation techniques using Tableau
- Design Business dashboard and story
- Using AI Tools for Data-Driven Research
- The Data Analytics Research Process

References:

1. Provost, F., & Fawcett, T. (2022). *Data science for business: What you need to know about data mining and data-analytic thinking*. O'Reilly Media.
2. Albright, S. C., & Winston, W. L. (2015). *Business analytics: Data analysis and decision making* (5th ed.). Cengage Learning.

MANDATORY COURSES

Vel Tech Rangarajan Dr Sagunthala R & D Institute of Science and Technology

Course Syllabus - Regulations : VTR UGE 2025

Course Code & Name	2519MG1001 - Project Management and Finance		NCrF Cr. Level	Course Level	Course Category	ESC (FC)	Engineering Science Course (ESC)	C	L	T	P	Hrs / Week	Tot. Hrs.	SL Hrs.*	Notional Hrs.	
			4.5	100-199				M	1	0	0	1	15	15	30	
Pre-requisite Courses	Nil	Department Offering the Course		Mechanical Engineering				Special Requirements such as Data Book/Charts etc., If any					Nil			
Course Learning Objectives																
• Ability to understand project management principles and philosophy.																
• To study feasibility of projects.																
• Knowledge of formulating the projects and project report preparation.																
• To learn how to use the network techniques in project management.																
• To enhance advance knowledge in evaluating the projects by applying the various capital budgeting techniques.																
CO - PO Mapping																
Course Outcomes (CO)	At the end of this course, students will be able to:			Program Outcomes (POs)										Program Specific Outcomes (PSOs)		
				1	2	3	4	5	6	7	8	9	10	11	PSO-1	PSO-2
CO-1	Understand the project management principles.			M									H			
CO-2	Make students familiarize to identify the investment opportunities and to formulate the projects.					H							H			
CO-3	Understand the students to contract management process.									H			H			
CO-4	Learn about different investment policies and value of money.									M			L			
CO-5	Explain the importance of capital budgeting techniques and project evaluation.										L		H			
Course Content																
UNIT - 1: BASICS OF PROJECT MANAGEMENT													No. of Hours		3	
Introduction - Nature of project - Types of projects-Project delay - Project manager skills- Project management principles-Project life cycle.																
UNIT - 2: PROJECT IDENTIFICATION AND FORMULATION													No. of Hours		3	
Project environment - Identification of investment opportunities - Project screening - Project selection - Project formulation.																
UNIT - 3: CONTRACT MANAGEMENT													No. of Hours		3	
Contract management - Procurement process - Managing project resources flow - Project constraints.																
UNIT - 4: FINANCIAL MANAGEMENT AND VALUATION													No. of Hours		3	
Functions of financial management - Investment policies - Time value of money -Compound value - Future values - Net present value - Present value of bonds and shares - Risk and returns.																
UNIT - 5: PROJECT EVALUATION													No. of Hours		3	
Essentials of a project evaluation -Capital budgeting - Techniques of project evaluation.																

Other Features/Components Covered											
Percentage of Course Content covering Syllabus of GATE / Other Examinations			Nil	Whether the course contain "Open Ended Experiments"?		Nil					
Percentage of Course Content covering Emerging Trends, Tools and Technology			20%	Whether the Course embedded with essential employability Skills?		Yes					
Whether the Course is taught with ALM Techniques and ICT Tools mandatorily?			Yes	Whether the Course is embedded with Industry skills Skills?		Yes					
Support for Course Learning											
Learning Resources (Text Books / Reference Books, Online Courses etc.,)	1. PK.Joy "Total Project Management -The Indian context", Mac Milan India Ltd.			1. Project Management : Management extra series – ANE books							
	2. R. Panneerselvam and P. Senthil Kumar "Project Management" PHI learning India PVT Ltd.			2. P.Gopalakrishnan & VE.Ramamoorthy "Project Management" Mac Milan India Ltd.							
	3. Bhavesh.M Patel, "Project Management" Vikas Publishing House PVT Ltd.			3. Erik W Larson and Clifford Fgray "Project Management: The Managerial Process" Mc Graw Hill/Irwin Series, Fifth Edition.							
	4. S.Choudhury "Project Management" Tata Mc Graw Hill Co.										
	5. Prasanna Chandra "Projects, Planning, analysis, selection financing, Implementation and Review" Tata McGraw Hill Co.										
Course Learning Assessment											
Continuous Internal Assessment (CIA)					Semester End Examinations (SEE)						
BT Level											
K1: Remember	√										
K2: Understand	√										
K3: Apply											
K4: Analyse											
K5: Evaluate											
K6: Create											
Total											
*Details of Self Learning (SL) Components/Activities Opted for this course											
S. No.	Component Name		# of Hrs.	S. No.	Component Name		# of Hrs.				
SLC-1	Assignment		2	SLC-5	Seminar and Presentation		3				
SLC-2	Online Quiz		1	SLC-6	Case Study		5				
SLC-3	ALM Activities		2	SLC-7							
SLC-4	Open Book Test		2	SLC-8							
Course Design Details											
Date of Creation		09-May-25		Date of Revision		NA		Date of Approval of BoS		10-May-25	
Dr.M.Karthick				Dr. S. Jayavelu							

Vel Tech Rangarajan Dr Sagunthala R & D Institute of Science and Technology

Course Syllabus - Regulations : VTR UGE 2025

Course Code & Name	2519MG1002 - Innovation and Entrepreneurship		NCrF Cr. Level	Course Level	Course Category	ESC (FC)	Engineering Science Course (ESC)	C	L	T	P	Hrs / Week	Tot. Hrs.	SL Hrs.*	Notional Hrs.	
			4.5	100-199				M	1	0	0	1	15	15	30	
Pre-requisite Courses	Nil	Department Offering the Course		Mechanical Engineering				Special Requirements such as Data Book/Charts etc., If any					Nil			
Course Learning Objectives																
• To introduce creativity, invention, innovation processes and problem identification.																
• To develop understanding of entrepreneurship fundamentals.																
• Analyze entrepreneurial opportunities in global contexts and growth factors for new ventures.																
• Examine the entrepreneurial ecosystem and decision-making frameworks to guide startup progression.																
• Teach crafting and analyzing business models for effective business pitching techniques.																
CO - PO Mapping																
Course Outcomes (CO)	At the end of this course, students will be able to:			Program Outcomes (POs)											Program Specific Outcomes (PSOs)	
				1	2	3	4	5	6	7	8	9	10	11	PSO-1	PSO-2
CO-1	Understand the meaning of innovation through intellectual property.															
CO-2	Infer the meaning of entrepreneurship through its characteristics.															
CO-3	Illustrate the entrepreneurial opportunities in innovation context.							M								
CO-4	Outline the process of entrepreneurial ecosystem and process.							M								
CO-5	Demonstrate the creation of business model canvas.							M				H				
Course Content																
UNIT - 1: INTRODUCTION TO INNOVATION												No. of Hours		3		
Creativity, Invention and Innovation -Problem finding: Economic/Environmental/Social problems- Various types of innovation. Need of innovation- IPR- Protection of IP- Innovation tools and techniques. Systematic innovation.																
UNIT - 2: INTRODUCTION TO ENTREPRENEURSHIP												No. of Hours		3		
Ideation activities: POC and prototypes, MVP - Scaling, Blue ocean strategy, Team discovery and formation- Entrepreneurial characteristics and challenges - Risk- Govt of India Initiatives. (Make in India, Digital India, NIDHI COE, etc.,)																
UNIT - 3: ENTREPRENEURIAL OPPORTUNITIES												No. of Hours		3		
Entrepreneurship in global context- Social and economic development, Opportunities, Discovery, Pattern identification and recognition for venture creation. Factors affecting entrepreneurial growth.																
UNIT - 4: ENTREPRENEURIAL PROCESS AND DECISION MAKING												No. of Hours		3		
Entrepreneurial ecosystem, Ideation, Development and exploitation of opportunities, Negotiation, Decision making process and approaches.																
UNIT - 5: CRAFTING BUSINESS MODELS & LEAN STARTUPS												No. of Hours		3		
Introduction to business models- Crafting value propositions, Conventional industry logic, Value innovation logic, Building and analysing business models, Lean startups, Business pitching.																

Other Features/Components Covered					
Percentage of Course Content covering Syllabus of GATE / Other Examinations		Nil	Whether the course contain "Open Ended Experiments"?		Nil
Percentage of Course Content covering Emerging Trends, Tools and Technology		20%	Whether the Course embedded with essential employability Skills?		Yes
Whether the Course is taught with ALM Techniques and ICT Tools mandatorily?		Yes	Whether the Course is embedded with Industry skills Skills?		Yes
Support for Course Learning					
Learning Resources (Text Books / Reference Books, Online Courses etc.)	1. Barringer., Entrepreneurship, Pearson Education, 2015.		1. R.K.Singhal., Entrepreneurship Development and Management, S.K.Ktaria and sons, Reprint 2013 edition. 2013		
	2. Robert D Hisrich, Michael P Peters. Dean A. Shepherd and Sabyasachi Sinha., Entrepreneurship, McGraw Hill Publication, 11th Edition, 2020.		2. A.K.Lal., Entrepreneurship Development and Management, New central book agency PVT LTD, 2011.		
	3. Mark A. Runco., Creativity: Theories and Themes: Research, Development and Practice, Academic press, 2nd Edition , 2014.		3. W. Chan Kim and Renee Mauborgne., Blue Ocean strategy: How to create uncontested Market Space and make the Competition Irrelevant, Harvard Business Review Press , 2015.		
			4. Eric Ries., The Lean Startup: How Constant Innovation Creates Radically Successful Business, Penguin UK, 2011.		
			5. Edward de Bono., Simplicity, Penguin Life, UK, 2015.		
Course Learning Assessment					
Continuous Internal Assessment (CIA)					Semester End Examinations (SEE)
BT Level					
K1: Remember	√				
K2: Understand	√				
K3: Apply					
K4: Analyse					
K5: Evaluate					
K6: Create					
Total					
*Details of Self Learning (SL) Components/Activities Opted for this course					
S. No.	Component Name	# of Hrs.	S. No.	Component Name	# of Hrs.
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SLC-2	Online Quiz	1	SLC-6	Case Study	5
SLC-3	ALM Activities	2	SLC-7		
SLC-4	Open Book Test	2	SLC-8		
Course Design Details					
Date of Creation	09-May-25	Date of Revision	NA	Date of Approval of BoS	10-May-25
Dr.M.Venkatasudhakar		Dr. S. Jayavelu			

Course Coordinator	Head of the Department	Dean of the School
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