MANIPAL
UNIVERSITY JAIPUR
University under Section 2(f) of the UGC Act

PROGRAMME PROJECT REPORT (PPR)

For

Master of Business Administration (MBA)
(ONLINE DEGREE PROGRAMME)

CENTRE FOR DISTANCE AND ONLINE EDUCATION (CDOE)
MANIPAL UNIVERSITY JAIPUR
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Manipal University Jaipur CDOE

MANIPAL UNIVERSITY CIQA JAIPUR

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PROGRAMME PROJECT REPORT

Introduction

At every step in one's life, one needs to transform, to compete, and improve. In today's dynamic business environment, being acquainted with concepts is not enough. It is essential to acquire and constantly upgrade knowledge about various dimensions of business. The **Manipal University, Jaipur** Online MBA Programme imparts knowledge and skill sets to students to achieve this, and face real world challenges. It teaches application of innovative practices to current business situations. It incorporates analysis of contemporary issues besides providing a strong theoretical foundation. It provides a collaborative learning environment with dedicated faculty to ensure students achieve their full potential. The online MBA Programme teaches one to work smartly, take the lead in critical situations, and influence business decisions more effectively. It teaches one to not only work efficiently, but also shape the business environment and create opportunities for further growth.

The Online Master of Business Administration (MBA) Programme is a two-year Programme. With inclusion of various specialisations, the Programme aims at developing focused managers with a strong understanding of their area of specialisation, even as the core subjects equip the students with fundamental management theories and concepts along with less tangible, but equally important soft skills. The Programme is designed to instil confidence, improve knowledge, and act as a catalyst in the search for success and growth.

1. Programme's Mission and Objectives

To offer a high-quality Masters' degree in Management (MBA) through Online mode to the students and working professionals to help them develop Managerial and Leadership skills to enhance their career prospects. The students will be able to move up their career ladder and/or launch out on an entrepreneurial career.

The objectives of the programme include:

- Introduce students to the basic concepts and domains of management including core concepts of Finance, HR and Marketing as well as new specialized areas like IB, SCM, IT, TQM, Banking & Insurance etc.
- Equip students with analytical skills and decision making
- Hone Skills of students and enable them to practice quantitative method techniques
- Inculcate entrepreneurial skills Managerial concepts with Leadership skills
- Develop knowledge about emerging markets and technologies

2. Relevance of Programme with Manipal University, Jaipur Mission and Goals

In order to align with the mission and goals of Manipal University Jaipur, the Online MBA Programme is planned to enable students and working professionals gain knowledge in various domains of management, specialize in a domain of their choice, gain knowledge of not only managerial skills including analysis, data based decision making and entrepreneurship, but also introduce them to Leadership role in newer and emerging markets, products and technologies.

Vision

Global Leadership in Higher Education and Human Development

Mission

- Be the most preferred University for innovative and interdisciplinary learning
- Foster Academic research and professional excellence in all domains
- Transform young minds into competent professionals with good human values.

3. Nature of Prospective Target Group of Learners

It is by now well accepted that an MBA degree is an important tool for professionals to enhance their knowledge of business, expand their career options and move up their career ladder, acquired Leadership skills or embark on an entrepreneurial journey.

This Online programme has been designed for conventional learners, as well as working professionals and other individuals aspiring to acquire knowledge and associated academic credentials. Considering that all candidates interested in pursuing a degree may not be able to afford the same through a campus mode for reasons of paucity of time or financial constraints, online delivery is a feasible option to enable them to acquire knowledge and skills. Delivery through this mode also contributes towards Gross Enrolment Ratio (GER) of 50% by 2035, as envisaged by the Government of India.

The programme is so designed that the prospective students who may not be able to afford full time, residential MBA are provided with high value learning, anytime, anyplace, at one's own pace.

4. Appropriateness of programme to be conducted in Online mode to acquire specific skills and competence

The courses in the programme are delivered through Self-Learning e-Module which is a modular unit of e-learning material which is inter-alia self-explanatory, self-contained, self-directed at the learner, and amenable to self-evaluation, and enables the learner to acquire the prescribed level of learning in a course of study and includes contents in the form of a combination of the following e-Learning content, and made available through four-quadrant approach namely,
(a) e-Tutorial - faculty led Audio - Video Lectures, (b) e-Content (combination of PDF/ epub) Text Materials, (c) Discussion forum for raising of doubts and clarifying the same on real time basis by the Course Coordinators/Course Mentors assigned to students (d) Self-Assessment Quiz, Test and Assignments to reinforce learning. Reference books are also mentioned in the syllabus. Latest Edition of Reference books may be referred to.

A robust Learning Management System that keeps track of delivery of e-Learning Programmes, learner's engagement, assessment, results and reporting in one centralized location, is in place. All of the above can be done/delivered by online and other platforms without much loss of fidelity. Hence the MBA programme is suited for Online mode of learning.

5. Instructional Design

5.1. Curriculum design

Curriculum has been designed by experts in the area of Management and care has been taken to include contemporary topics, as well as topics that also inculcate environmental awareness in students. The curriculum and syllabus are approved by the Board of Studies, Centre for Internal Quality Assurance (CIQA) and University Academic Council which consists of experts from Academia and Industry.

5.2. Programme structure and detailed syllabus

5.2.1. Programme Structure

	1st Semester	
Course Code	**Title**	**Credits**
DMBA113	Entrepreneurial Practice	3
DMBA114	Business Communication (WAC)	2
DMBA115	Managerial Economics	3
DMBA116	Financial Accounting	3
DMBA117	Data Visualization (Excel/Tableau)	3
DMBA118	Organizational Behaviour	3
DMBA119	Marketing Management	3
	2nd Semester	
DMBA214	Business Research Methods (R/Python)	3
DMBA215	Operation Management	3
DMBA216	Human Resource Management	3
DMBA217	Management Accounting	3
DMBA218	Financial Management	3
DMBA219	Legal Aspects of Business	3
DMBA220	Business Communication (VAC)	2
	3rd Semester	
DMBA305	Strategic Management	4
DMBA306	Term Paper	4
	4 Subjects in area of specialisation (4 credits each)	16
	4th Semester	
DMBA409	International Business Management	4
	4 Subjects in area of specialisation (4 credits each)	16
DMBA404	Project	6
	Total Credits	**90**

	(ELECTIVES)	
	3rd semester (Finance)	
DFIN305	Security Analysis and Portfolio Management	4
DFIN306	Financial Services	4
DFIN307	Financial Statement Analysis	4
DFIN308	International Financial Management	4
	4th semester (Finance)	
DFIN405	Financial Modelling	4
DFIN406	Behavioural Finance	4
DFIN407	Financial Econometrics	4
DFIN408	Financial Risk Management	4
	3rd semester (Marketing)	
DMKT305	Sales and Distribution Management	4
DMKT306	Consumer Behavior	4
DMKT307	Retail Marketing	4
DMKT308	Marketing Research	4
	4th semester (Marketing)	
DMKT405	Services Marketing and Customer Relationship Management	4
DMKT406	Strategic Marketing	4
DMKT407	B2B Marketing	4
DMKT408	Integrated Marketing Communication	4
	3rd Semester (HRM)	
DHRM305	Human Resource Planning	4
DHRM306	Management and Organizational Development	4
DHRM307	Industrial Relations	4
DHRM308	HR Issues in Corporate Restructuring	4
	4th Semester (HRM)	
DHRM405	Compensation Management	4
DHRM406	Performance Management	4
DHRM407	Learning Organizations	4
DHRM408	Organizational Change and Development	4
	3rd Semester (Analytics and Data Science)	
DADS305	Programming in Data Science	4
DADS306	Exploratory Data Analysis	4
DADS307	Introduction to Machine Learning	4
DADS308	Visualization	4
	4th Semester (Analytics and Data Science)	
DADS405	Advanced Machine Learning	4
DADS406	Unstructured Data Analysis	4
DADS407	Business Analytics	4
DADS408	Data Scraping	4

	3rd Semester (Banking, Financial Services & Insurance)	
DBFI305	Bank Management and Financial Risk Management	4
DBFI306	Financial Statement Analysis and Business Valuation	4
DBFI307	Principles and Practices of Insurance	4
DBFI308	Financial Services	4
	4th Semester (Banking, Financial Services & Insurance)	
DBFI405	ALM and Treasury Management	4
DBFI406	Banking Regulations and Risk Management in Banking	4
DBFI407	Insurance Management	4
DBFI408	Investment Banking and Wealth Management	4
	3rd Semester (IT and FinTech)	
DITF305	Database Management Systems	4
DITF306	Software Engineering	4
DITF307	Technology Management	4
DITF308	Business Intelligence and Tools	4
	4th Semester (IT and FinTech)	
DITF405	E-Commerce	4
DITF406	FinTech Payments and Regulations	4
DITF407	Cryptocurrency and Blockchain	4
DITF408	Information Systems Management	4
	3rd Semester (Operations Management)	
DOMS305	Advanced Production and Operations Management	4
DOMS306	Introduction to Project Management	4
DOMS307	Logistics and Supply chain Management	4
DOMS308	Applications of Operations Research	4
	4th Semester (Operations Management)	
DOMS405	Services Operations Management	4
DOMS406	Total Quality Management	4
DOMS407	Production, Planning and Control	4
DOMS408	Enterprise Resource Planning	4
	(ELECTIVES)	
	3rd semester (International Business)	
DIBM305	International Financial Management	4
DIBM306	International Marketing	4
DIBM307	International HRM	4
DIBM308	Export-Import Management	4
	4th semester (International Business)	
DIBM405	Foreign Trade of India	4
DIBM406	Global Logistics and SCM	4
DIBM407	International Business Environment and International Law	4
DIBM408	Export-Import Finance	4
	3rd semester (Information System Management)	
DISM305	Software Engineering	4
DISM306	Database Management Systems	4
DISM307	Technology Management	4
DISM308	Business Intelligence and Tools	4
	4th semester (Information System Management)	
DISM405	Information Systems Management	4
DISM406	E-Commerce	4
DISM407	Computer Networks	4
DISM408	Java and Web Design	4

	3rd Semester (Project Management)	
DPRM305	Introduction to Project Management	4
DPRM306	Project Planning and Scheduling	4
DPRM307	Project Finance and Budgeting	4
DPRM308	Managing Human Resources in Projects	4
	4th Semester (Project Management)	
DPRM405	Quantitative Methods in Project Management	4
DPRM406	Project Risk Management	4
DPRM407	Project Quality Management	4
DPRM408	Contracts Management in Projects	4
	3rd Semester (Supply Chain Management)	
DSCM305	Logistics and Supply chain Management	4
DSCM306	Outsourcing	4
DSCM307	Digital Transformation in Supply Chain Management	4
DSCM308	Inventory Management	4
	4th Semester (Supply Chain Management)	
DSCM405	Global Logistics and Supply Chain Management	4
DSCM406	Category Management in Purchasing	4
DSCM407	Purchasing and Contracting for Projects	4
DSCM408	Supply Chain Cost Management	4
	3rd Semester (Digital Marketing)	
DDIM301	Introduction to Digital Marketing	4
DDIM302	Social Media Marketing	4
DDIM303	Search Engine Marketing and SEO	4
DDIM304	Ethics in Digital Marketing	4
	4th Semester (Digital Marketing)	
DDIM401	Digital Branding and Reputation Management	4
DDIM402	Digital Entrepreneurship	4
DDIM403	E-Marketing	4
DDIM404	Advertising and Brand Management	4
	3rd Semester (Retail Marketing)	
DRMM305	Sales and Distribution Management	4
DRMM306	Retail Customer Relationship Management	4
DRMM307	Retail Marketing	4
DRMM308	e-retailing	4
	4th Semester (Retail Management)	
DRMM405	International Retailing	4
DRMM406	Entrepreneurship in Retail Business	4
DRMM407	Retail Buying and Merchandising	4
DRMM408	Advertising and Brand Management	4

SEMESTER 1

COURSE CODE: DMBA113	ENTREPRENEURIAL PRACTICE

Course Description:
This course, Entrepreneurship Practice, is designed to provide students with a comprehensive understanding of the entrepreneurial journey, from ideation to execution and growth. It explores the foundational concepts of entrepreneurship, the entrepreneurial mind-set, and the strategies required to transform innovative ideas into successful ventures. Through a blend of theoretical knowledge and practical application, students will learn to identify opportunities, develop business plans, secure funding, and navigate the legal and organizational challenges of starting and scaling a business. The course also emphasizes corporate entrepreneurship, global opportunities, and strategies for sustainable growth.

Course Objectives:
The primary objective of this course is to equip students with the skills, tools, and confidence needed to become successful entrepreneurs or intrapreneurs.

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

- Understand the entrepreneurial process and mind-set.
- Generate and evaluate business ideas using creative and analytical techniques.
- Develop a comprehensive business plan and organizational strategy.
- Identify and analyze domestic and international market opportunities.
- Navigate legal, financial, and operational challenges in entrepreneurship.

Course Contents:

Unit No.	**Details**
Unit 1	**Entrepreneurship and the Entrepreneurial Mind-Set**: Introduction, Nature of Entrepreneurship, How Entrepreneurs Think, The Intention to Act Entrepreneurially, Entrepreneur Background and Characteristics, Role Models and Support System, Sustainable Entrepreneurship, Case Study.
Unit 2	**Corporate Entrepreneurship:** Introduction, Reason for Interest in Corporate Entrepreneurship, Managerial Versus Entrepreneurial Decision-Making, Establishing Corporate Entrepreneurship in the Organization.
Unit 3	**Entrepreneurial Strategy:** Introduction, Generating and Exploiting New Entry Opportunities: New Entry, Generation of a New Entry Opportunity, Entry Strategy for New Entry Exploitation, Risk Reduction Strategies for New Entry Exploitation.
Unit 4	**Creativity and the Business Idea:** Introduction, Creativity and Entrepreneurship, Sources of New Ideas, Methods of Generating Ideas, Creative Problem Solving, Creativity and Entrepreneurship, Entrepreneurship Innovation, Opportunity Recognition, Product Planning and Development Process, E-Commerce and Business Start-up.

Unit 5	**Identifying and Analyzing Domestic and International Opportunities:** Opportunity Reco gnition and the Opportunity Assessment Plan, Information Sources, Sources of Information for Start-up Entrepreneurs in India, The Nature of International Entrepreneurship, Foreign Market Selection, Entrepreneurial Entry Strategies, Entrepreneurial Partnering, Barriers to International Trade, Implications for the Global Entrepreneur.
Unit 6	**Protecting the Idea and the Other Legal Issues for the Entrepreneur**: Intellectual Property, Need for a Lawyer, and How to Select a Lawyer? Legal Issues in Setting up the Organization, Patents, Business Method Patents, Startup Without a Patent, Trademarks, Copyrights, Trade Secrets and Non-competition Agreements, Licensing, Product Safety and Liability, Insurance.
Unit 7	**The Business Plan:** Creating and Starting the Venture, Planning as Part of the Business Operation, Business Plan, Writing the Plan, Scope and Value of the Business Plan, How Do Potential Leaders and Investors Evaluate the Plan? Presenting the Plan, Inform ation Needs, Financial Information Needs, Using the Marketing Plan, Industry Analysis, Marketing Research for the New Venture, Difference between a Business Plan and a Marketing Plan, Preparing the Marketing Plan, Characteristics of a Marketing Plan, The Marketing Mix, Steps in Preparing the Marketing Plan.
Unit 8	**The Organizational Plan:** Developing the Management Team, Legal Forms of the Business, Tax Attributes of Forms the Business, The Limited Liability Company, Building the Management Team and a Successful Organization Culture, The Role of a Board Director, The Board of Advisors, The Organization and use of consultants. The Financial Plan: Operating and Capital Budgets, Forecasting Sales, Pro Forma Income Statements, Pro F orma Cash Flow Statement, Pro Forma Balance Sheet, Break-Even Analysis, Pro Forma Sources and Applications of Funds Statement.
Unit 9	**Sources of Capital:** Personal Funds, Family and Friends, Commercial Banks, Role of government agencies, R & D Partnerships, Government Grants, Private Placement, Bootstrapping, Informal Risk Capital, Venture Capital and Going Public.
Unit 10	**Strategies for Growth and Managing Implications:** Growth strategies, Implications of Growth, Overcoming pressure on existing HR, employee, entrepreneurs, Accessing resources for growth from external sources: external support, joint ventures, acquisitions, mergers, leveraged buyouts (LBOS), franchising. Succession planning and strategies for harvesting and ending the venture: exit strategy, succession of business, option for selling the business, bankruptcy law for companies in India, reorganisation and keeping the venture going, warning signals of bankruptcy, Business turnaround.

Reference Book:

- Entrepreneurship, by Robert D. Hisrich, Michael P. Peters, Dean A. Shepherd & Sabyasachi Sinha, *Entrepreneurship*, **(11th ed.)**, McGraw-Hill Education, 2020.
- Entrepreneurship The Practice and Mindset, by Heidi M. Neck, Christopher P. Neck, Emma L. Murray & Patricia G. Greene, **(2nd/3rd ed.)**, SAGE Publications, 2021–2023.
- Entrepreneurial Development, by S. S. Khanka, **Revised Edition**, S. Chand Publishing, 2020.
- Entrepreneurship Development, by Abha Mathur, Taxmann Publications, 2021.
- Innovation and Entrepreneurship, by Joe Tidd & John Bessant, **(4th ed.)**, Wiley, 2023.

- Entrepreneurship Development, by Buddhadeb Chandra & Bhaskar Biswas, Tee Deep Publication, 2023.
- Entrepreneurship Development, by Jayshree Suresh, Margham Publications, 2023.
- P. Charantimath, *Entrepreneurship Development Small Business Enterprises*, Pearson

COURSE CODE: DMBA114	**BUSINESS COMMUNICATION (WAC)**

Course Description:
Effective communication is the cornerstone of success in the business world. This course provides students with an in-depth understanding of business communication principles and practices. It explores both traditional and modern channels of communication, covering written, oral, and digital methods used in contemporary business environments. Through practical exercises and case-based learning, students will develop clarity, conciseness, and confidence in conveying messages, making decisions, and building professional relationships.

Course Objectives:
By the end of this course, students will be able to:

- Understand the foundational principles and process of communication in a business context.
- Identify and apply various types and channels of communication appropriately.
- Develop effective business writing skills with a focus on clarity, tone, and purpose.
- Craft professional memos, circulars, letters, and business reports.
- Demonstrate competence in oral business communication, such as presentations, meetings, and interviews.
- Utilize digital communication tools responsibly and efficiently in a business setting.
- Enhance interpersonal and intercultural communication skills for diverse business scenarios.

Course Contents:

Unit No.	Details
Unit 1	**Basic Principles of Communication** – Introduction, Understanding Communication, The Communication Process, Barriers to Communication, Classification of Communication, The Importance of Communication in the Workplace.
Unit 2	**Types and Channels of Communication-** Introduction, Types of Communication, Classification of Non-verbal Communication, Classification of Communication Channels.
Unit 3	**Guidelines for Written Business Communication-** Introduction, General Principles of Writing, Principles of Business Writing.
Unit 4	**Internal and External Business Communication:** – Introduction, Memo, Circulars and Notices, Principles of Business Letter Writing, Types of Business Letters, Format for Business Letters, Communicating through Emails.

Unit 5	**Internal and External Business Communication – Writing Business Reports –** Introduction, Report, Types of Business Reports, Format for Business Reports, Steps in Report Preparation, Writing Persuasive Proposals.
Unit 6	**Developing Oral Business Communication Skills** - Advantages of Oral Communication, Types of Oral Communication, Oral Business Presentations
Unit 7	**Digital Communication**: Writing for digital platforms: blogs, social media, websites, Email etiquette and professional correspondence, Writing for international audiences, Tools and Resources for Digital Writing.

Reference Book:

- Locker, K. O., Braun, K., & Kaczmarek, S. K. (2016). *Business communication: Building critical skills* (7th ed.). McGraw-Hill Education
- Hạnh, T. N. (2013). *The art of communicating*. HarperOne
- Heath, C., & Heath, D. (2010). *Made to stick: Why some ideas survive and others die*. Random House Books
- Patterson, K., Grenny, J., McMillan, R., Switzler, A., & Gregory, E. (2021). *Crucial conversations: Tools for talking when stakes are high* (3rd ed.). McGraw Hill

COURSE CODE: DMBA115	**MANAGERIAL ECONOMICS**

Course Description:

The managerial economics course offers a comprehensive exploration of economic principles essential for effective managerial decision-making. From a macroeconomic perspective, the course examines critical challenges for managers, including the impact of economic cycles (recession and depression), GDP measurement, and national income accounting. Students will analyze monetary and fiscal policies, their objectives, instruments, and real-life implications, including Union Budget analysis. Key macroeconomic topics such as inflation, money supply, exchange rates, and the balance of payments are also covered, providing a well-rounded understanding of economic forces shaping business environments. This course equips future managers with the analytical tools to navigate complex economic landscapes and make informed strategic decisions.

Course Objectives:

On completion of this course, learners will be able to:

- Apply economic principles to real-world business scenarios, improving decision-making processes.
- Analyze market dynamics, including demand, supply, and pricing strategies, to optimize business performance.
- Evaluate different market structures and their impact on competition and pricing decisions.
- Formulate strategies based on economic models, enhancing resource allocation and profitability.

- Understand the influence of government policies and economic fluctuations on business operations.
- Make informed strategic decisions that support organizational growth and sustainability.

Course Contents:

Unit No.	Details
Unit 1	**Meaning and Importance of Managerial Economics:** Introduction, Meaning, Scope of Managerial Economics, Importance of the Study of Managerial Economics, Functions of a Managerial Economist.
Unit 2	**Demand Analysis:** Introduction, Meaning and Law of Demand, Elasticity of Demand, Degree and Determinants of Elasticity of Demand.
Unit 3	**Supply & Market Equilibrium**: Introduction, Meaning of Supply and Law of Supply, Exceptions to the Law of Supply, Changes or Shifts in Supply. Elasticity of supply, Factors Determining Elasticity of Supply, Practical Importance, Market Equilibrium and Changes in Market Equilibrium, Consumer surplus and Producer Surplus.
Unit 4	**Production Analysis and Cost Analysis:** Introduction, Meaning of Production and Production Function, Production function with one variable Input, Production function with two variable inputs, Returns to Scale, Economies of Scale, Economies of Scope, Types of Costs, Cost-Output Relationship: Cost Function, Cost-Output Relationships in the Short Run, and Cost-Output Relationships in the Long Run.
Unit 5	**Revenue Analysis and Pricing Policies:** Introduction, Revenue: Meaning and Types, Relationship between Revenues and Price Elasticity of Demand, Pricing Policies, Objectives of Pricing Policies, Pricing Methods.
Unit 6	**Price Determination under Perfect Competition:** Introduction, Market and Market Structure, Perfect Competition, Price-Output Determination under Perfect Competition (general model), equilibrium of the industry and the firm under perfect competition, short-run firm equilibrium under perfect Competition, long-run industry equilibrium under Perfect competition, long-run Firm equilibrium under Perfect competition, Monopoly, Price Discrimination under Monopoly, Bilateral Monopoly, Monopolistic Competition, Oligopoly, Collusive Oligopoly and Price Leadership, Duopoly, Industry Analysis.
Unit 7	**Macroeconomics and Some of Its Measures:** Introduction, Basic Concepts, Macroeconomic Ratios, Index Numbers. Measuring the output, Gross domestic product (GDP), Nominal GDP vs Real GDP, GDP deflator.
Unit 8	**Consumption Function and Investment Function:** Introduction, Consumption Function, Investment Function, Marginal efficiency of capital and business expectations, Multiplier, Accelerator.
Unit 9	**Policies & Exchange Rates:** Introduction, Economic Stability, Instruments of Economic Stability, Monetary Policy, Fiscal Policy, Physical Policy or Direct Controls, Exchange rate, Balance of payments.
Unit 10	**Inflation and Deflation:** Inflation - Meaning and Kinds, Measures to Control Inflation, Deflation. Challenges for managers from micro and macro environment perspectives, slow down/recession/ depression and conventional and non -conventional measures.

Reference Book:

- Brickley, J. A., Smith, C. W., & Zimmerman, J. L. (2021). *Managerial economics and organizational architecture* (7th ed.). McGraw-Hill Education
- Dwivedi, D. N. (2023). *Managerial economics* (9th ed.). Vikas Publishing House
- Maheshwari, Y. (2019). *Managerial economics* (3rd ed.). PHI Learning
- Nadar, E. N., & Vijayan, S. (2018). *Managerial economics*. PHI Learning
- Alhabeeb, M. J. (2020). *Managerial economics: A mathematical approach*. Wiley

COURSE CODE: DMBA116	**FINANCIAL ACCOUNTING**

Course Description:

This course serves as an introduction to financial accounting, equipping students with the skills to understand and prepare financial statements. It covers essential topics such as the systematic process of recording financial transactions, the creation of standardized financial reports, and their role in decision-making. The course introduces key financial statements, including the Income Statement and Balance Sheet. These statements provide insights into a company's financial health and performance. Students will also learn foundational accounting concepts like assets, liabilities, equity, income, and expenses, as well as the principles that guide financial reporting.

Course Objectives:
On completion of this course, learners will be able to:

- To provide a comprehensive understanding of financial accounting and its role in business decision-making.
- To teach students how to prepare key financial statements, including the Income Statement, Balance Sheet, and Statement of Cash Flows.
- To introduce essential accounting principles and concepts, such as the Accrual Concept, Matching Concept, and Going Concern Concept.
- To provide an understanding of the double-entry accounting system and how it ensures the balance of the accounting equation.
- To enable students to analyze and interpret financial statements for better business decisions.

Course Contents:

Unit No.	Details
Unit 1	**Introduction to Financial Accounting** – Introduction, Meaning of Accounting, Bookkeeping and Accounting, The Accounting Process, Objectives of Accounting,

	Difference between Bookkeeping and Accounting, Use of Accounting Information, Limitations of Accounting, Basic Terminologies.
Unit 2	**Accounting Principles, Concepts and Conventions:** Introduction, Meaning of Accounting Principles, Concepts and Conventions, Types of Accounting Concepts, Types of Accounting Principles, Types of Accounting Conventions.
Unit 3	**Accounting Policies:** Meaning of Accounting Policies, Introduction to Accounting Policies (GAAP & US GAAP), Changes in Accounting Policies, Accounting Standards, Scope and Functions of Accounting Standards Board, International Financial Reporting System.
Unit 4	**Double Entry Accounting:** Introduction, meaning of double entry accounting, Classification of Accounts, Journal Entries, Journal Entries with Adjustments.
Unit 5	**Secondary Books:** Introduction to Secondary books, Ledger-Types, Forms, Posting, Rules, Balancing, Meaning and Definition of Ledger, Cashbook, Single Column Cash Book, Double Column Cash Book, Triple Column Cash Book, Petty Cash Book.
Unit 6	**Trial Balance:** Introduction, Meaning & Features, Objectives of Preparing a Trial Balance, Methods of preparing a Trial Balance, Format of a Trial Balance, Adjusting Entries, Errors and their rectification, Limitations of Trial Balance.
Unit 7	**Final Accounts:** Introduction, Final Accounts-Adjustments before preparing final accounts, Preparation of Final Accounts - Trading Account, Profit and Loss Account, and Balance Sheet, Treatment of Adjustments.
Unit 8	**Depreciation Accounting:** Meaning & Causes for Depreciation, Need for depreciation, Methods of charging depreciation- Straight line method, Written Down Value Method and Annuity Method, Sum-of-the-Years'-Digits (SYD) Method, ICAI Guidelines on Depreciation.
Unit 9	**Window Dressing in Financial Statements: Introduction,** Meanings, Benefits, Techniques of Window Dressing in Accounting, Ethics in Accounting.
Unit 10	**Non-Financial Reporting:** Introduction**,** Meaning of Non-Financial Reporting, History of Non-Financial Reporting**,** Corporate Social Responsibility (CSR), Difference between Corporate Social Responsibility and Corporate Sustainability, Sustainability Disclosures, Latest Non-Financial Reporting Frameworks.

Reference Book:

- Financial Accounting, by Robert Libby, Patricia Libby & Frank Hodge, (11th ed.), McGraw-Hill Education, 2025.
- Financial Accounting, by John J. Wild & Prakash Singh, (11th ed.), McGraw-Hill Education, 2024.
- Financial Accounting, by Wendy M. Tietz & C. William Thomas, (14th ed.), Pearson Education, 2024.
- Financial Accounting, by Bhushan Kumar Goyal & H. N. Tiwari, Taxmann Publications, 2025.
- Financial Accounting, by R. L. Gupta & V. K. Gupta, Sultan Chand & Sons, 2025.
- Essentials of Financial Accounting for Business Managers, by Asish K. Bhattacharyya, (6th ed.), PHI Learning, 2023.
- Fundamental Financial Accounting, by Jayanta Ghosh, 2025 Edition, Santra Publication, 2025.

COURSE CODE: DMBA117	DATA VISUALIZATION (EXCEL/TABLEAU)

Course Description:
The *Data Visualization* course equips students with the knowledge and skills to represent complex data visually using tools like Tableau and Power BI. This course transforms raw data into actionable insights through graphs, charts, and dashboards. Students will learn to identify the most effective visualization techniques for different data types, analyse patterns, and present data engagingly to inform decision-making.

Course Objectives:
On completion of this course, learners will be able to:

- Understand the Core Principles and Importance of Data Visualization
- Develop Proficiency in Excel for Data Analysis and Visualization
- Master Basic and Advanced Visualization Techniques in Tableau
- Create Interactive Dashboards and Data Stories in Tableau

Course Contents:

Unit No.	Details
Unit 1	**Introduction to Data Visualization**: Overview of Data Visualization, Importance and benefits of data visualization in various fields, Key principles: clarity, simplicity, accuracy, and storytelling, Application of Data Visualization, Basic visualization Types.
Unit 2	**Overview of Excel for Data Visualization:** Introduction**,** Excel Interface Essentials: Familiarization with the Excel workspace: Ribbon, menus, and toolbars, Introduction to data types (numbers, text, dates) and basic operations in Excel. Data Import and File Management: - Techniques for importing data from different sources (CSV, databases). File organisation and best practices for data management in Excel.
Unit 3	**Basic Charts in Excel:** Introduction, Creating and Formatting Charts: - Step-by-step guide to creating basic charts: bar, line, and pie charts. Bar Charts, Line Graph, Format charts with labels, colours, and legends for readability and understanding Chart Selection.
Unit 4	**Advanced Data Analysis in Excel:** Introduction**,** Building PivotTables and Pivot Charts: Building and customising PivotTables for data summarisation, Creating Pivot Charts and applying filters for interactive analysis, Conditional Formatting and Sparklines: Applying conditional formatting to highlight important data trends. Using Sparklines to display data trends within cells.
Unit 5	**Advanced Visualization Techniques in Excel:** Combining Multiple Charts, Advanced Formatting Options, Exploring advanced chart formatting, data labels, and colour gradients. Dynamic Data Visualizations: Adding interactivity to charts with features like slicers and timelines**.**

Unit 6	**Introduction to Tableau:** Overview of Tableau Interface and Key Features: Familiarization with the Tableau workspace, data pane, and toolbar. Basic navigation: worksheets, dashboards, and stories. Connecting to Data Sources in Tableau.
Unit 7	**Building Basic Visualizations in Tableau:** Creating Basic Charts: Guide to building bar, line, and pie charts in Tableau. Customising visual elements: labels, colours, and tooltips. Filters, Sets, and Groups in Tableau.
Unit 8	**Advanced Visualization Techniques in Tableau:** Calculated Fields and Parameters: Creating calculated fields to derive new data insights. Using parameters to enable dynamic, user-controlled visualisations. Advanced Charts in Tableau.
Unit 9	**Creating Interactive Dashboards in Tableau: Interactive Dashboards-Definition,** Building Dashboards for Data Exploration, combining multiple charts into interactive dashboards, Adding interactivity with filters, highlights, and dashboard actions.
Unit 10	**Storytelling with Data in Tableau:** Introduction, Definition, Creating Data Stories, Structuring visualizations into a cohesive narrative for data storytelling, developing sequences of visualizations to guide viewers through insights, Best Practices for Tableau Visualizations, Guidelines for effective visual communication: consistency, simplicity, and focus.

Reference Book:

- Storytelling with Data: A Data Visualization Guide for Business Professionals, by Cole Nussbaumer Knaflic, Wiley, 2020 Edition. *(Best for business dashboards and visual storytelling)*
- The Big Book of Dashboards, by Steve Wexler, Jeffrey Shaffer & Andy Cotgreave, Wiley, 2021 Reprint Edition. *(Excellent for Tableau dashboards and KPI visualization)*
- Hands-On Data Visualization, by Jack Dougherty & Ilya Ilyankou, O'Reilly Media, 2021. *(Covers spreadsheets, Tableau Public, and interactive visualization)*
- Mastering Tableau 2023, by David Baldwin, Packt Publishing, 2023. *(Advanced Tableau analytics and dashboard development)*
- Practical Tableau, by Ryan Sleeper, O'Reilly Media, Updated Edition, 2022. *(Hands-on Tableau visualization techniques)*
- Microsoft Excel 365 Bible, by Michael Alexander & Dick Kusleika, Wiley, 2024. *(Comprehensive Excel visualization and dashboarding techniques)*
- Data Visualization: A Practical Introduction, by Kieran Healy, Princeton University Press, Updated Edition 2023. *(Strong fundamentals of visualization principles)*
- Tableau For Dummies, by Molly Monsey & Paul Sochan, Wiley, 2022. *(Beginner-friendly Tableau learning resource)*

COURSE CODE: DMBA118	**ORGANIZATIONAL BEHAVIOUR**

Course Description:

The Organisational Behaviour course for students explores the interaction between individuals, teams, and organisations. It blends management principles with behavioural insights to develop leaders who can navigate the complexities of modern businesses. The course covers essential topics like leadership, decision-making, team dynamics, motivation, communication, and managing change. It prepares students to understand human behaviour within an organisational context and to apply this understanding to real-world management challenges.

Course Objectives:

On completion of this course, learners will be able to:

- To introduce students to key concepts of organisational behaviour and their application to
- management practices.
- To develop essential managerial skills such as leadership, decision-making, and effective
- communication.
- To explore how individual, group, and organisational behaviour impacts organisational success.
- To equip students with tools for managing diverse teams, fostering innovation, and driving change.
- To provide a global perspective on organisational structure, culture, and strategy.

Course Contents:

Unit No.	Details
Unit 1	**Introduction to Management:** Definition, Nature of Management, Importance of Management, Development of Management Thought, Social Responsibilities of Business, Managerial Skills.
Unit 2	**Planning in Management**: Introduction, Planning in Management**,** Steps in the Planning Process, Scope and Limitations, Short- And Long-Range Planning, Flexibility in Planning, Characteristics of a Sound Plan, Management by Objectives (MBO), Policies and Strategies, Scope and Formulation, Decision Making, Techniques and Processes.
Unit 3	**Organizing in Management:** Introduction to Organizing in Management, Organizational Structure and Design, Authority and Responsibility Relationships, Delegation of Authority and Decentralization, Interdepartmental Coordination, Mechanistic Vs Adoptive Structures, Formal and Informal Organization.
Unit 4	**Management Process:** Introduction, Staffing, meaning and importance, staffing process, Directing, meaning and importance, Controlling, steps in the controlling process.
Unit 5	**Perception, Learning and Personality in Workplace:** Introduction, Perception and learning, Application of Learning Theories in Organisational Settings, personality and individual differences, motivation and job performance, values, attitudes, and beliefs, Integrating Perception, Learning, Personality, and Motivation.
Unit 6	**Communication and Stress Management–** Introduction, Concept of Communication, The Communication Process, Types, Barriers, Making Effective Communication, Introduction to Stress and Stress Management, Impact of Stress on Employees and Organisations, Stress Management Techniques, Organisational Strategies for Managing Stress, Case Studies on Communication and Stress Management
Unit 7	**Group Behaviour -**Definition and Overview of Team, Characteristics of An Effective Team, Seventeen Characteristics of An Effective Team, Designing A Team, Team Wheel, Key Issues in Team Building, Seven Steps of Intact Team Building, Cross-Functional Teams.

Unit 8	**Group Dynamics and Leadership-** Introduction, Introduction to Group Dynamics and Leadership, Leadership Styles and their Impact, Approaches to Leadership, Power and Policies in Leadership, Organizational Structure, Organization climate and Culture, Emerging Trends in Corporate Structure, Strategy, and Culture.
Unit 9	**Organisational Change and Development** – Introduction, Definition and Overview of Organisational Change, Theories and Models of Organisational Change, Managing Organisational Change, Organisational Development (OD), Comparative Management Styles and Approaches, Challenges in Organisational Change And Development.
Unit 10	**Innovation and Diversity in Management-** Introduction, Management of innovation, entrepreneurial management, benchmarking, best management practices across the world. Management of Diversity, Innovation, and Diversity in Organisational Culture.

Reference Book:

- Organisational Behaviour, by Stephen P. Robbins & Timothy A. Judge, **(19th ed.)**, Pearson Education, 2023.
- Organisational Behaviour: An Evidence-Based Approach, by Fred Luthans, Brett C. Luthans & Kyle W. Luthans, **(14th ed.)**, Information Age Publishing, 2021.
- Organisational Behaviour, by Steven McShane, Mary Ann Von Glinow & Himanshu Rai, **(9th ed.)**, McGraw-Hill Education, 2022.
- Essentials of Organisational Behaviour, by Stephen P. Robbins & Timothy A. Judge, **(14th ed.)**, Pearson Education, 2021.
- Organisational Behaviour, Open Textbook Library, Updated Open Edition, 2021. *(Useful free academic reference for concepts and case studies*

COURSE CODE: DMBA119	**MARKETING MANAGEMENT**

Course Description:

Marketing Management is a foundational course in the MBA curriculum that introduces students to the core concepts, strategies, and practices of modern marketing. This course explores the dynamic marketing environment and equips students with the analytical tools and decision-making skills required to craft customer-centric marketing strategies. Through a blend of theoretical frameworks and practical applications, students learn to analyze markets, understand consumer behavior, segment and target customers, and position products effectively. Topics include product and brand management, pricing strategies, distribution channels, integrated marketing communication, digital marketing trends, and ethical considerations in marketing.

Course Objectives:

On completion of this course, learners will be able to:

- To provide a comprehensive understanding of marketing concepts, functions, and the role of marketing in business strategy.
- To enable students to analyze consumer and market behavior using modern marketing research tools.

- To develop skills to formulate effective marketing strategies related to product, price, place, and promotion (4Ps).
- To foster critical thinking in adapting marketing strategies to a rapidly changing digital and global marketplace.
- To enhance decision-making capabilities through case studies, real-life examples, and simulations in marketing management.

Course Contents:

Unit No.	Details
Unit 1	**Introduction to Marketing Management:** Introduction, Evolution of Marketing, Nature and Scope of Marketing, Core Concepts of Marketing, Functions of Marketing, Importance of Marketing, Selling vs. Marketing, Marketing Orientations.
Unit 2	**The Marketing Process:** Introduction, Marketing Mix-The Traditional 4Ps, The Modern Components of the Mix- The Additional 3Ps, Developing Marketing Strategies and Plans, Building Customer Value, Satisfaction and Loyalty. Marketing Research Process.
Unit 3	**Marketing Environment:** Introduction, Environmental Scanning, Analysing the Organisation's Microenvironment, Company's Macro Environment, Differences between Micro and Macro Environment, Techniques of Environment Scanning.
Unit 4	**Consumer Buying Behavior:** Introduction, Consumer Behavior, Types of Buying Decision Behaviour: Henry Assael Model, Consumer Buying Decision Process, Buyer Decision Process for New Products, Buying Motives, Buyer Behaviour Models.
Unit 5	**Segmentation, Targeting and Positioning:** Introduction, Concept of Market Segmentation, Benefits of Market Segmentation, Requisites of Effective Market Segmentation, Levels and Selecting Market Segments and Targeting, Bases of Segmenting Consumer Markets, Levels of Market Segmentation, Process of Selecting Market Segments, Targeting, Market Targeting Criteria, Market Positioning (P), Developing Value Proposition, Positioning Strategies,
Unit 6	**Product Management:** Introduction, Levels of Products, Classification of Products, Product Hierarchy, Product Line Strategies, Product Mix Strategies, Packaging and Labelling, New Product Development, Product Life Cycle (PLC), Diffusion of innovation.
Unit 7	**Pricing:** Introduction, Objectives, Factors Affecting Price Decisions, Different Methods of Pricing, Value-Based and Competition-Based Pricing, Product Mix Pricing Strategies, Adjusting the Price of the Product, Initiating and Responding to the Price Changes.
Unit 8	**Distribution Management**: Introduction, Need for Marketing Channels, Physical distribution and channel management, Decisions Involved in Setting up the Channel, Channel Management Strategies, Introduction to Retail marketing, Introduction to Retailing, Wholesaling.
Unit 9	**Promotion Management: I**ntroduction**,** Promotion-mix: Advertising, Sales Promotion, Personal Selling, Publicity and Public Relations, AIDAS model, Sales Process and Marketing Funnel, Branding, Integrated Marketing Communications (IMC).
Unit 10	**Customer Relationship Management and Other Contemporary Issues: I**ntroduction, Relationship Marketing Vs. Relationship Management, Customer Relationship Management (CRM), Forms of Relationship Management, Managing Customer Loyalty and Development, Reasons Behind Losing Customers by Organisations, Significance of

	Customer Relationship Management, Rural Marketing, Services Marketing, E-Marketing or Online Marketing, Nature of International Marketing, e-retailing, New age media, ethics in marketing.

Reference Book:

- Marketing Management, by Philip Kotler, Kevin Lane Keller & Alexander Chernev, **(17th ed.)**, Pearson Education, 2025.
- Marketing Management, by Philip Kotler, Kevin Lane Keller & Alexander Chernev, **(16th ed.)**, Pearson Education, 2022.
- A Framework for Marketing Management, by Philip Kotler & Kevin Lane Keller, **(7th ed.)**, Pearson Education, 2022.
- Principles of Marketing, by Philip Kotler & Gary Armstrong, **(19th ed.)**, Pearson Education, 2023.
- Marketing 5.0, by Philip Kotler, Hermawan Kartajaya & Iwan Setiawan, Wiley, 2021.
- Marketing 6.0, by Philip Kotler, Hermawan Kartajaya, Hooi Den Huan & Jacky Mussry, Wiley, 2023.

SEMESTER 2

COURSE CODE: DMBA214	BUSINESS RESEARCH METHODS (R/PYTHON)

Course Description:

This course offers a comprehensive overview of business research methodologies and practical applications using R programming. Students will learn the fundamentals of research design, data collection, and data processing techniques. The curriculum covers critical topics such as exploratory data analysis (EDA), visualization, and advanced statistical methods, including regression, ANOVA, and multivariate analysis—all executed in R. Emphasis is placed on converting data-driven insights into actionable business strategies and effectively communicating findings through well-structured research reports. This course equips future business leaders with the analytical tools needed to make informed decisions in a data-driven environment.

Course Objectives:

On completion of this course, learners will be able to:

- Explain the key concepts, types, and processes involved in conducting business research.
- Utilize R programming for data import, cleaning, exploration, and creating visual representations to identify trends and patterns.

- Evaluate various methods of data collection, both primary and secondary, and apply data processing techniques using R.
- Perform univariate, bivariate, regression, and advanced statistical analyses using R and interpret the results for business applications.
- Structure and write comprehensive research reports, integrating tabular data, visualizations, and actionable recommendations.

Course Contents:

Unit No.	Details
Unit 1	**Introduction to Research:** Meaning of research, Types of research, Importance of Business Research Methods, Basic Concepts of Research in Business, The process of research.
Unit 2	**Overview of R for Business Research:** Introduction to R Programming, Overview of R Interface, Data Types and Data Structures in R, Basic Operations using R, File Management using R.
Unit 3	**Data Collection:** Methods of Data Collection Classification of Data, Secondary Data, Uses, Advantages, Disadvantages, Types and sources, Primary Data Collection, Observation method, Focus Group Discussion, Personal Interview method.
Unit 4	**Data Processing:** Data Editing, Field Editing, centralized in house editing, Coding, Coding Closed ended structured Questions, Coding open ended structured Questions, Classification and Tabulation of Data. Data Import and Export in R, Data Cleaning and Preparation Techniques, Handling Missing Data in R Descriptive Statistics.
Unit 5	**Data Visualization** - Creating Plots and Graphs in R Exploratory Data Analysis (EDA) using R - Introduction to EDA, Techniques for Data Exploration, Using R for EDA: Summary Statistics, Visualizations, Identifying Patterns and Trends in Data.
Unit 6	**Univariate and Bivariate Analysis of Data:** Descriptive vs Inferential Analysis, Descriptive Analysis of Univariate data- Analysis of Nominal scale data with only one possible response, Analysis of Nominal scale data with multiple category responses, Analysis of Ordinal Scaled Questions, Measures of Central Tendency, Measures of Dispersion, using R – Computation of Mean, Median, Mode, Measures of Dispersion: Range, Variance, Standard Deviation, Summarizing and Describing Data.
Unit 7	**Chi-square& ANOVA Analysis:** Chi square test for the Goodness of Fit, Chi square test for the independence of variables, Chi square test for the equality of more than two population proportions, analysis using R, Analysis of Variance: Completely randomized design in a one-way ANOVA, Randomized block design in two-way ANOVA, ANOVA in R, Interpreting Results and Making Inferences.
Unit 8	**Regression Analysis**: Introduction to Regression Analysis, Simple Linear Regression (Model Building and Interpretation), Multiple Linear Regression (Assumptions, Diagnostics, and Model Fit), Using R for Regression Analysis.
Unit 9	**Advanced Statistical Methods -** Introduction to Multivariate Analysis, Factor Analysis, Cluster Analysis, Time Series Analysis (Concepts and Applications), Using R for Advanced Statistical Methods.
Unit 10	**Research Report Writing:** Types of research reports – Brief reports and Detailed reports, Report writing: Structure of the research report- Preliminary section, Main report, Interpretations of Results and Suggested Recommendations, Report writing: Formulation rules for writing the report: Guidelines for presenting tabular data, Guidelines for visual Representations.

Textbook:

- Emma Bell, Bill Harley, Alan Bryman, *Business Research Methods* (6th Edition, 2022).

Reference Book:

- Joe F. Hair Jr., Michael Page, Niek Brunsveld, et al., *Essentials of Business Research Methods* (5th Edition, 2023).
- Barry J. Babin, William G. Zikmund, Jon C. Carr, Mitch Griffin, Christina Quinlan, *Business Research Methods* (3rd Edition, 2024).
- H.K. Dangi, Shruti Dewen, *Business Research Methods* (2nd Edition, 2024).
- Pamela S. Schindler, Kapil Gumte, Pratik Maheshwari, *Business Research Methods* (14th Edition, 2025).

COURSE CODE: DMBA215	OPERATION MANAGEMENT

Course Description:
This course provides a comprehensive overview of the fundamental principles and practices of managing operations in both manufacturing and service environments. It addresses important topics like process analysis, quality control, demand forecasting, supply chain management, capacity and layout planning. Students will learn how to use tools and methods to plan, execute, and improve operations in organizations. The course uses both case studies and real-time examples to give students the knowledge they need to make good choices that improve business performance, efficiency, and productivity.

Course Objectives:
On completion of this course, learners will be able to:

- Understand the strategic importance of operations management and its integration with other business functions.
- Master analytical techniques for process mapping, bottleneck identification, and flow optimization using concepts like Little's Law and the Theory of Constraints.
- Apply various qualitative and quantitative techniques, including time-series models, for effective demand forecasting.
- Evaluate strategies for capacity planning, facility location, and layout design to optimize resource utilization.
- Comprehend the principles of supply chain management, materials management, and inventory control systems like JIT and MRP.

Course Contents:

Unit No.	Details
Unit 1	**Introduction to Operations:** Introduction, Operations Management and Strategy, Tools for Implementation of Operations, Industry Best Practices.
Unit 2	**Operations Strategy:** Introduction to Operations Strategy, Competitive Capabilities and Core Competencies, Elements or Components of Operations Strategy, Operations Strategy as a Competitive Weapon, how operations relate to other functional areas of an organization, relationships that exist between various factors that affect operations of a business organization.
Unit 3	**Supply Chain Management:** Introduction, Supply Chain Management, supply chain performance factors Process Analysis: Mapping a process, capacity and bottlenecks, Load balancing, Cycle time, takt, Setup times and batches, Little's Law, Job Shop, Batch, Assembly Line, theory of constraints, Case Studies (Process Analysis Simulation (HBR

	Case Study); Bottlenecks and Batching in Dragon Fruit Jam Production (HBR Case); Kamaths Our times Ice-creams: Eliminating the Bottlenecks Effect) .
Unit 4	**Demand Forecasting:** Introduction, The Strategic Importance of Forecasting, Qualitative and Quantitative Methods; Econometrics Models; Moving Average Forecasting; Autoregressive Models; ARIMA Models; Demand Forecasting using Excel and ARIMA.
Unit 5	**Capacity and Layout Planning:** Demand forecasting, strategies for managing capacity to meet demand, capacity and facility design, facility location models decision support tools, optimizing layout design to meet customer demand, optimizing layout to improve capacity utilization.
Unit 6	**Location Strategies:** Introduction, Location Planning Process, Factors Influencing Location Strategy Decisions, Location Selection Techniques: Factor-Rating Method, Location Break-even Analysis.
Unit 7	**Introduction to Materials Management:** Material requirements planning, interaction with production planning and control, purchasing processes, materials forecasting, inventory management fundamentals, Just-In Time manufacturing, warehouse management.
Unit 8	**Quality Management Systems:** Total Quality Management fundamentals, Cost of Quality concept, process variation, process capability, process control, utilizing Lean Six Sigma for processes to meet customer specifications, Quality Function Deployment.
Unit 9	**Operations Scheduling:** Introduction, Purpose of Operations Scheduling, Factors considered while Scheduling, Scheduling Activity under PPC, Scheduling Strategies, Scheduling Guidelines, Approaches to Scheduling, Scheduling in Services.
Unit 10	**Aggregate Planning:** Introduction, Requirement of Aggregate Plan, Steps in Developing an Aggregate Plan, Advantages of Aggregate Plan, Aggregate Planning Strategies, Planning Options. Selecting the Method in Aggregate Planning, Aggregate Planning in Services.

Reference Book:

- Nigel Slack, Alistair Brandon-Jones, Nicola Burgess , *Operations Management* (10th Edition, 2024) .

- Lee J. Krajewski, Manoj K. Malhotra, *Operations Management: Processes and Supply Chains* (14th Edition, 2024).
- Jay Heizer, Barry Render, Chuck Munson, Amit Sachan, *Operations Management: Sustainability & Supply Chain Management* (12th Edition, 2024).
- R. Dan Reid, Nada R. Sanders, Sidhartha S. Padhi, *Operations Management* (8th Edition, 2024 – Indian Adaptation).
- Dmitry Ivanov, Alexander Tsipoulanidis, Jörn Schönberger, *Global Supply Chain and Operations Management* (4th Edition, 2025).

COURSE CODE: DMBA216	**HUMAN RESOURCE MANAGEMENT**

Course Description:

This course provides a comprehensive understanding of the principles, functions, and practices of Human Resource Management (HRM) in modern organizations. It focuses on the strategic role of HR in achieving organizational goals through effective management of people. Students will explore key HR functions such as manpower planning, recruitment and selection, performance management, training and development, compensation, and employee relations.

Course Objectives:

On completion of this course, learners will be able to:

- Understand Human resource Management and its relevance in an organization
- Understand the process of recruitment, selection & forecasting technique and talent management in organizations for skill development
- Apply techniques of recruitment and selection
- Learn about Performance management, performance appraisal technique, training, succession planning and career development and their implementation
- Design and formulate various HRM processes such as Recruitment, Selection, Training, Development, Performance appraisals and Reward Systems, Compensation Plans and Ethical Behaviour

Course Contents:

Unit No.	Details
Unit 1	**Introduction to Human Resource Management:** Introduction, Concept of Human Resource Management, Significance, Objectives. Evolution and Development of Personnel Management and HRM; Scope of Human Resource Management, History of Human Resource Management, Function of Human Resource Management, Role of HR Executives, Difference between H.R.M., H.R.D, and Personnel Management.
Unit 2	**HRM in India:** Introduction, Changing Role of Human Resource in India, Globalization, Its Impact on HR. Key Roles, Functions and Activities of HRM.
Unit 3	**Human Resource Planning:** Process of Human Resource Planning, Need for Human Resource Planning, HR Forecasting Techniques, Successful Human Resource Planning, Strategic Human Resource Management.
Unit 4	**Recruitment and Selection:** Concept of Recruitment, Factors Affecting Recruitment, Sources of Recruitment, Recruitment Policy, Selection, Selection Process, Application Forms, Selection Test, Interviews, Evaluation, Placement, Induction. Role Analysis and Placement.
Unit 5	**Training and Management Development:** Meaning of Training, Area of Training, Methods of Training, Concept of Management Development, Management Development Methods, Differences Between Training and Development, Evaluation of Training and Management Development, Talent Management and Retention strategies. Phases of Training, Need Assessment, Training Methods and Evaluation.
Unit 6	**Employee Career Planning and Growth:** Concept of Employee Growth, Managing Career Planning, Elements of a Career Planning Programme, Succession Planning.
Unit 7	**Performance Appraisal:** process; tools; errors; Potential Appraisal Concept and Need for Performance, Reviews, Overview of Performance Appraisal, Types of Appraisal Methods, 360-degree appraisal, Benefits, Performance Measurement, Performance Drivers. Wage and Salary Administration, Managing Wages, Concept of Rewards and Incentives, Managing Benefits in Organisations, Workers Participation in Management.
Unit 8	**Job Evaluation:** Concept of Job Evaluation, Objectives, Techniques, Advantages and Limitations, Introduction to Competency. Concept of Job Analysis and Design, Process of Job Analysis, Methods of Job Analysis, Job Analysis Information, Concept of Job Design. Competency Mapping, Business Process Outsourcing, Right Sizing of Workforce, Flexi time, Talent Management, Employee Engagement.
Unit 9	**Employee Misconduct and Disciplinary Procedure:** Meaning and Objectives of Discipline, Principles for Maintenance of Discipline, Basic Guidelines of a Disciplinary Policy, Disciplinary Action – Penalties, Procedure for Disciplinary Action. Industrial Disputes. Concept of Grievance, Causes of Grievances, Forms and Effects of Grievance,

	the Grievance Handling Procedure, Need for Grievance Redressal Procedure, Collective Bargaining, Trade Unions.
Unit 10	**Employee Welfare and Working Conditions:** Concept of Employee Welfare, Welfare Measures, Types, Employee Welfare Responsibility, the Business Benefits of Employee Welfare Activities, Employee empowerment, Managing Industrial Relations & Contemporary issues in HRM: Dynamics of Industrial Relations; Human Resource Information System: Introduction, Concept, Components, Types, Application, Implementation, Benefits, Impact, Work-life Balance, Human Resource Accounting and Audit.

Reference Book:

- K. Aswathappa, Sadhna Dash , *International Human Resource Management (Latest Edition 2024).*
- David A. DeCenzo, Susan L. Verhulst, Promila Agarwal , *Human Resource Management* (15th Edition, Indian Adaptation, 2025).
- Adrian Wilkinson, Tony Dundon, Edward Yates, *Contemporary Human Resource Management: Text and Cases* (7th Edition, 2025).
- Nick Wilton, *An Introduction to Human Resource Management* (6th Edition, 2025).
- Robert L. Mathis, John H. Jackson, Sean Valentine, Patricia Meglich, *Human Resource Management* (17th Edition, 2025)

COURSE CODE: DMBA217	MANAGEMENT ACCOUNTING

Course Description:

This course offers a comprehensive understanding of management accounting, focusing on its role in strategic decision-making and organizational performance. Students will explore essential concepts such as cost analysis, budgeting, performance measurement, and variance analysis. Emphasis is placed on using accounting information to support planning, control, and decision-making processes. The course also covers contemporary topics like activity-based costing, balanced scorecards, and cost-volume-profit analysis. Through practical applications and case studies, students will learn how to interpret and apply financial data, optimize resource allocation, and contribute to strategic business decisions. This course equips future managers with the financial acumen needed to drive organizational success in a competitive environment.

Course Objectives:

On completion of this course, learners will be able to:

- Define the key concepts of management accounting
- Explain the purpose and methods of financial statement analysis, such as ratio analysis and the Du Pont Chart.
- Prepare Funds Flow and Cash Flow Statements following the relevant accounting standards.
- Analyze cost data using methods like marginal costing, CVP analysis, and break-even analysis.
- Evaluate different business decisions, such as make-or-buy and market entry options.
- Create a budgetary control system and perform variance analysis for effective decision-making.

Course Contents:

Unit No.	Details
Unit 1	**Introduction to Management Accounting:** Introduction, Meaning of Management accounting, The Role of Management Accounting, Management Accounting Framework, Functions of Management Accounting, Tools of Management Accounting, The Balanced Scorecard, Cost Management System, Value Added Concept, Merits of Management Accounting, Demerits of Management Accounting, Distinction between Management Accounting and Financial Accounting.
Unit 2	**Analysis of Financial Statements:** Introduction, Meaning of Ratio, Steps in Ratio Analysis, Classification of Ratios, Du Pont Chart, Solved Problems, Advantages of Ratio Analysis, Limitation of Ratio analysis.
Unit 3	**Funds Flow Analysis:** Introduction, Meaning of Funds Flow Statement, Ascertainment of flow of funds, Technique of preparing funds flow statement, Schedule of Changes in Working Capital, Adjusted Profit and Loss account, Funds Flow Statement.
Unit 4	**Cash Flow Analysis:** Introduction, Meaning of Cash Flow Statement, Purpose of Cash Flow Statement, Preparation of Cash Flow Statement, Format of Cash Flow Statement (AS3: Revised Method), Cash Flow from Operating Activities, Cash Flow Statement under Direct Method, Different between Cash Flow Analysis and Fund Flow Analysis, Uses of Cash Flow Statement.
Unit 5	**Understanding Cost:** Introduction, Meaning of Cost, Objective of Costing, Methods of Costing, Technique of Costing, Classification of Cost, Elements of Cost, Statement of Cost Sheet, Solved Problems.
Unit 6	**Marginal Costing:** Introduction, Concept of Marginal Costing, Characteristics of Marginal Costing, Difference between Absorption Costing and Marginal Costing, Marginal Cost, Contribution, Cost Volume Profit (CVP) Analysis, Break Even Chart, Break Even Point, Profit Volume ratio or MCSR, Target profit, Margin of Safety, Application of Marginal cost, Limitations of Marginal cost, Solved Problems.
Unit 7	**Decisions Involving Alternative Choices:** Introduction, Decision Making, Types of Costs, Types of Choices Decisions, Make or Buy Decisions, Addition/Discontinuance of a Product line, Sell or Process Further, Operate or Shut down, Exploring New Markets, Maintaining a desired level of profit.
Unit 8	**Budgetary Control:** Introduction, meaning of a Budget, Budgetary control, Objectives of budgetary control, Merits of budgetary control, Essential features of Budgetary Control, Steps in budgetary Control, Types of Budgets, Cast Budget, Flexible Budget, Limitation of Budget Control.
Unit 9	**Standard Costing:** Introduction, Definition of Standard Costing, Meaning, Difference between Standard cost and Budgetary Control, Establishment of standards, Variance analysis, Material cost variance, Material price variance, Material usage variance, Material Mix variance, Material Yield variance, Direct labor variance, Labor Efficiency Variance, Labor Rate variance, Labor mix variance, Labor Yield Variance.
Unit 10	**Financial Planning and Forecasting:** Long Term Financial Planning, Short Term Financial Planning, Financial Forecasting, Steps in Financial Planning.

Reference Book:

- Alnoor Bhimani, Srikant M. Datar, Charles T. Horngren, Madhav V. Rajan , *Management and Cost Accounting* (8th Edition, 2024).
- Carsten Rohde, Will Seal, Karen Mustard, Ray H. Garrison, Eric W. Noreen , *Management Accounting* (7th Edition, 2024).

- P.C. Tulsian, Tushar Tulsian, Bharat Tulsian, Tulsian's *Management Accounting* (2024 Edition).
- M.N. Arora, Priyanka Katyal, *Management Accounting: Theory, Problems & Solutions* (10th Edition, 2024).
- Colin Drury, Mike E. Tayles, *Management and Cost Accounting* (12th Edition, 2024).

COURSE CODE: DMBA218	FINANCIAL MANAGEMENT

Course Description:
This course provides a comprehensive exploration of financial management principles, essential for making sound business decisions and maximizing organizational value. Students will learn key concepts such as capital budgeting, financial planning, risk management, and capital structure. Topics include cash flow analysis, valuation methods, cost of capital, and working capital management. The course also examines the role of financial markets, dividend policies, and mergers and acquisitions. Through real-world case studies and practical exercises, students will develop analytical skills to assess financial performance, manage resources effectively, and formulate strategies that align with organizational goals. This course prepares future leaders to navigate complex financial environments with confidence and precision.

Course Objectives:
On completion of this course, learners will be able to:

- Understand the role and scope of financial management.
- Apply financial tools for investment and financing decisions.
- Identify and solve financial management challenges.
- Analyze the impact of financial decisions on firm performance.
- Integrate financial concepts into strategic business planning.

Course Contents:

Unit No.	Details
Unit 1	**Financial Management:** Scope and objectives of Finance; Profit maximization vs. Wealth maximization; Functions of Financial Management, Interface between Finance and Other Business Functions.
Unit 2	**Financial Planning:** Introduction, Objectives, Benefits, Guidelines, Steps in Financial Planning, Factors Affecting Financial Planning, Fund Raising- Source of funding: domestic & international.
Unit 3	**Time Value of Money:** Introduction, Rationale, Future Value, Present Value, time value of annuity and perpetuity – loan amortization.
Unit 4	**Cost of Capital:** Introduction, Meaning of Cost of Capital, Cost of Different Sources of Finance, Weighted Average Cost of Capital.
Unit 5	**Leverage:** Introduction, Operating Leverage, Application of Operating Leverage, Financial Leverage, Combined Leverage.

Unit 6	**Capital Structure and Firm Value:** Capital Structure Decision, NI, NOI Approach, and MM Hypothesis.
Unit 7	**Capital Budgeting:** Introduction, Importance of Capital Budgeting, Complexities Involved in Capital Budgeting Decisions, Phases of Capital Expenditure Decisions, Identification of Investment Opportunities, Rationale of Capital Budgeting Proposals, Capital Budgeting Process, Investment Evaluation, Appraisal Criteria.
Unit 8	**Working Capital Management:** Introduction, Objective of Working Capital Management, Operating Cycle, Determinants of Working Capital, Working Capital Financing, Estimation of Working Capital. Cash Management: Introduction, Meaning and Importance of Cash Management, Motives for Holding Cash, Objectives of Cash Management, Cash Budgeting.
Unit 9	**Inventory Management:** Introduction, Role of Inventory in Working Capital, Purpose of Inventory, Costs Associated with Inventories, Inventory Management Techniques, Receivable Management: Introduction, Costs Associated with Maintaining Receivables, Credit Policy Variables, Evaluation of Credit Policy.
Unit 10	**Dividend Decisions:** Introduction, Traditional Approach, Dividend Relevance Model, Miller and Modigliani Model, Stability of Dividends, Forms of Dividends.

Textbook:

- Eugene F. Brigham, Michael C. Ehrhardt , *Financial Management: Theory and Practice* (17th Edition, 2024).

Reference Book:

- Jonathan Berk, Peter DeMarzo, *Corporate Finance* (5th Edition, recent global editions 2023–24).
- Prasanna Chandra, *Financial Management* (2024 Edition).
- Eugene F. Brigham, Joel F. Houston, *Fundamentals of Financial Management: Concise* (12th Edition, 2025)
- Sheridan Titman, Arthur J. Keown, John D. Martin , *Financial Management: Principles and Applications* (14th Edition, 2025).

COURSE CODE: DMBA219	**LEGAL ASPECT OF BUSINESS**

Course Description:

This course provides an in-depth understanding of the legal frameworks that govern business operations in India. It covers fundamental laws such as the Indian Contract Act, the Sale of Goods Act, Partnership Law, and key corporate regulations under the Companies Act, 2013. Students will also study important legislations like the Negotiable Instruments Act, the Consumer Protection Act, and the Competition Act, gaining practical insights into their real-world applications. The course further explores contemporary issues, including foreign exchange regulations and intellectual property rights, with a strong emphasis on compliance and ethical business practices. By blending theoretical knowledge with practical case studies, the course prepares students to navigate complex business environments confidently, responsibly, and with a sound legal foundation.

Course Objectives:

On completion of this course, learners will be able to:

- Explain the nature, scope, and sources of Indian law, focusing on its relevance to business operations and managerial decision-making.
- Analyze various types of contracts under the Indian Contract Act, including their formation, performance, breach, and legal implications.
- Compare legal aspects of partnerships, LLPs, and companies, understanding their formation, governance, and dissolution processes.
- Assess the rights of consumers under the Consumer Protection Act and analyze anti-competitive practices regulated by the Competition Act.
- Understand the legal frameworks for patents, trademarks, copyrights, and trade secrets, including infringement remedies and protection mechanisms.

Course Contents:

Unit No.	Details
Unit 1	**Introduction to Business Law:** Introduction, Meaning and Nature of Law, Sources of Indian Law, Legal Environment of Business, Mercantile Law, Some Basic Legal Concepts, Essentials of Law.
Unit 2	**Law of contract:** Introduction, Objectives, Definition of a Valid Contract, Offer and Acceptance, Capacity to Contract, Consent, Consideration, Classification of Contracts, Performance of Contracts, Discharge of Contracts, Breach of Contract and Void Agreements, Quasi Contracts, Freedom to Contract, Contracts of Guarantee and indemnity, Contracts of Bailment and Pledge, Contract of Agency.
Unit 3	**Law of Partnership:** Introduction, Meaning and Nature of Partnerships, Registration of Firms, Partnership Deed, Relations of Partners to One Another, Relations of Partners to Third Parties, Types of Partnerships, Changes in a Firm, Dissolution, Limited Liability Partnership (LLP) Act 2008: Concept of LLP; difference with partnership and company; registration of LLP; liabilities of partners; transferability of shares.
Unit 4	**Law of sales of goods:** Contract of sale, Goods and their classification, meaning of price, Conditions and Warranties, Passing of property in goods, Transfer of title by non-owners, Performance of a contract of sale, Unpaid seller and his rights, Remedies for breach of contract.
Unit 5	**Law of negotiable instruments:** Negotiable instruments, Promissory notes, Bills of exchange, Cheques, Negotiation, Presentment, Dishonor, crossing of cheques, Paying banker.
Unit 6	**Consumer protection act 2019:** Negotiable instruments, Promissory notes, Bills of exchange, Cheques, Negotiation, Presentment, Dishonor, crossing of cheques, Paying banker.
Unit 7	**The Competition Act 2002:** Introduction, Definitions, Enquiry into Certain Agreements and Dominant Position of Enterprise and Combinations, Miscellaneous Provisions, Finance, Accounts and Audit, MRTP Act,1969.
Unit 8	**The Foreign Exchange Management Act 1999:** Introduction, Definitions, Regulation and Management of Foreign Exchange, Authorized Person, Contravention and Penalties [Sections13-15], Adjudication and Appeal [Sections 16-35], Directorate of Enforcement, Miscellaneous Provisions.
Unit 9	**The Company's Act 2013:** Introduction, Formation of a Company, Memorandum of Association, Articles of Association, Prospectus, Shares, Directors, General Meetings and Proceedings, Auditor, Winding up, Types and Provisions of Company's Act, 2013, Securities and Exchange Board of India Act, 1992.

Unit 10	**Intellectual Property Laws:** Introduction, Legal Aspects of Patents, Filing of Patent Applications, Rights from Patents, Infringement of Patents, Penalty and Trademark Infringement, Legal Protection for Trade Secrets, Infringement of Geographical Indications and Remedies for Infringement, Copyright and its Ownership, Infringement of Copyright, Civil Remedies for Infringement.

Textbook:

- Akhileshwar Pathak, *Legal Aspects of Business* (8th Edition, 2023).

Reference Book:

- Rajdeep Banerjee, Joyeeta Banerjee, *Legal Aspects of Business* (2022).
- P. K. Padhi*, Legal Aspects of Business* (2nd Edition – Updated) (2019)
- Ravinder Kumar, *Legal Aspects of Business* (7th Edition, 2025).

COURSE CODE: DMBA220	**BUSINESS COMMUNICATION (VAC)**

Course Description:

This course comprises of Vocal Communication between a superior and a subordinate should be two-way and transparent to avoid any communication gap. Today, business communication is no more confined to paperwork or telephone calls. The scope of business communication has widened with the advent of technology. Technology has made possible video conferencing, satellite communication and e-mails. The advanced form of business communication has changed the way meetings, interviews and group discussions are held. Hence, effective business communication is quintessential to any organization.

Course Objectives:

On completion of this course, learners will be able to:

- Describe the key elements in the communication process
- Identify the barriers to communication and suggest ways to overcome these barriers
- Select which channel to use in different situations, as a business communicator
- Distinguish between general and business writing

Course Contents:

Unit No.	Details
Unit 1	**Verbal Communication:** Presentation Skills, Planning and organizing presentations, Use of visual aids and multimedia, Techniques for delivering effective presentations.
Unit 2	**The Importance of Listening in the Workplace:** Introduction, what is listening? Barriers to Listening, Strategies for Effective Listening, Listening in a Business Context.
Unit 3	**Public Speaking:** Overcoming public speaking anxiety, Strategies for persuasive speaking, Audience analysis and engagement.
Unit 4	**Non-Verbal Communication:** Understanding body language, Cultural differences in non-verbal cues, Building rapport through non-verbal communication.

Unit 5	**Team Communication and Collaboration:** Team Dynamics and Communication, Roles and responsibilities in teams, Effective team meetings and collaboration tools, Conflict resolution and negotiation**.**
Unit 6	**Cross-Cultural Communication:** Communicating in a global business environment, Cultural sensitivity and adaptation, Strategies for effective cross-cultural interactions, Crisis Communication.
Unit 7	**Digital Communication:** Introduction, Prerequisites, what should you not do during a virtual meeting? Virtual Meeting Etiquette: Rules to Remember.

Textbook:

- Paula Lentz, Kathryn Rentz, Kristen Getchell, *Business Communication: A Problem-Solving Approach* (2024).

Reference Book:

- Curtis Newbold, Jessie Lynn Richards, *Business and Professional Communication: A Human-Centered Approach* (2024).
- Bestoon Abdulmaged Othman, Preeti Chitkara, Sulabh Chitkara, *Business Communication* (2024).
- Mary Ellen Guffey, Dana Loewy, *Business Communication: Process & Product* (11th Edition, 2024/2025).
- John V. Thill, Courtland L. Bovee, *Business Communication Today* (16th Edition, 2025).

SEMESTER 3

COURSE CODE- DMBA305	**STRATEGIC MANAGEMENT**

Course Description:
This course provides a comprehensive understanding of the concepts, principles, and practices of strategic management in contemporary business environments. It begins with an introduction to the fundamentals and evolution of strategy, highlighting its scope, importance, and role in defining organizational purpose through vision, mission, goals, and core competencies.
The course examines the strategic management process, including the role of strategists at different organizational levels and the formulation of various types of strategies. Emphasis is placed on strategy analysis through environmental scanning techniques such as PESTEL analysis, Porter's Five Forces model, and SWOT analysis to assess organizational position and competitive advantage.

Course Objectives:
On completion of this course, learners will be able to:

- To understand the fundamental concepts, principles, and evolution of business policy and strategic management.
- To analyze the strategic management process, including strategy formulation, implementation, evaluation, and control.
- To apply strategic analysis tools such as SWOT Analysis, PESTEL Analysis, and Porter's Five Forces Model to assess business environments and competitive advantage.
- To evaluate corporate, global, and strategic alliance decisions while incorporating ethical, CSR, and governance considerations.

- To develop strategic thinking by examining contemporary trends, business continuity planning, and challenges in dynamic business environments.

Course Contents:

Unit No.	Detailed Syllabus
Unit 1	**Introduction to Strategies:** Introduction, Fundamentals of Strategy, Conceptual Evolution of Strategy, Scope and Importance of Strategies, Purpose of Business, Difference between Goals and Objectives of Business, Strategic Intent through Vision and Mission Statements, Core Competencies of Business.
Unit 2	**Strategic Management**: Introduction, Strategic Management, Need, scope, key features, and importance of strategic management, Strategic Management Process, Role of Strategists in Decision Making, strategists at various management levels, Types of Strategies, Limitations of Strategic Management.
Unit 3	**Strategy Analysis:** Introduction, Strategy Analysis and its Importance, Environmental Appraisal and Scanning Techniques; PESTEL analysis, Porter's five forces model, SWOT analysis, Organisational Position and Strategic Advantage Profile, Strategic Management Model.
Unit 4	**Strategy Formulation:** Introduction, Strategy Formulation, Process in Strategy Formulation, Corporate level strategy: growth strategy, diversification strategy, stability strategy, retrenchment strategy; Portfolio analysis; BCG Matrix, GE-nine cell matrix.
Unit 5	**Strategy Implementation:** Strategy Implementation and its Stages, Reasons for Strategy Failure and Methods to Overcome, Leadership for Effective Strategy Implementation.
Unit 6	**Strategic Alliances:** Introduction, Strategic Alliances, Types of Strategic Alliances and Business Decisions, Problems Involved in Strategic Alliances.
Unit 7	**Strategic Control and Evaluation**: Introduction, Strategy Evaluation, Strategic Control, Difference Between Strategic Control and Operational Control, Concept of Synergy and its Meaning, Key Stakeholder's Expectations.
Unit 8	**International Strategy and Globalization**: Introduction, Multinational Corporations (MNCs), Benefits of MNCs, Limitations of MNCs, Business Strategies of MNCs, Entry mode strategies, Porter's Diamond of competitive advantage, challenges of globalization.
Unit 9	**Business Continuity Plan:** Introduction, concepts of Business Continuity Plan (BCP), relevance and importance of BCP, steps in BCP, business impact areas, BCP and its influence on strategic management, BCP and its influence on policy making, and contingency planning.
Unit 10	**Business Investment Strategies:** Introduction, business plan and business venture, and business investment strategies.
Unit 11	**Business Ethics and Corporate Social Responsibility:** Introduction, Ethics and Values, Ethical Conduct and Unethical Conduct, Impact of Ethical Conduct, Corporate Social Responsibilities (CSR), Business obligations, Social Audit and Corporate Governance
Unit 12	**Role of Creativity and Innovation in Business:** Introduction, Creativity, Innovation, Creating and Building Creative and Innovative Business Culture, Business Practices Adopted to Promote Creativity and Innovation, Importance of Creativity and Innovation in Business, Challenges Involved in Creativity, and Innovation.
Unit 13	**Challenges in Strategic Management:** Introduction, Strategic Management as an Organisational Force, Dealing with Strategic Management in Various Situations, Strategic Management Implications, and Challenges.
Unit 14	**Recent Trends in Strategic Management:** Introduction, Strategic Thinking, strategic leadership, contemporary strategic thoughts; blue ocean and red ocean strategies, Digital Strategy, Global strategy, green strategy, and sustainability.

Reference Books:

- Rothaermel, F. T. (2023). *Strategic management* (6th ed.). McGraw-Hill Education.
- Hill, C. W. L., Schilling, M. A., & Jones, G. R. (2022). *Strategic management: Theory & cases: An integrated approach* (14th ed.). Cengage Learning.
- David, F. R., David, F. R., & David, M. E. (2021). *Strategic management: A competitive advantage approach, concepts and cases* (17th ed.). Pearson Education.
- Johnson, G., Whittington, R., Scholes, K., Angwin, D., & Regnér, P. (2023). *Exploring strategy: Text and cases* (13th ed.). Pearson.
- Lynch, R. (2021). *Strategic management* (9th ed.). Pearson.

Finance

Finance

COURSE CODE-DFIN305	**SECURITY ANALYSIS AND PORTFOLIO MANAGEMENT**

Course Description: This course on *Security Analysis and Portfolio Management* provides a comprehensive understanding of investment strategies and financial market dynamics. Students will explore key concepts such as risk-return analysis, asset valuation, equity and bond markets, and portfolio construction. The course covers fundamental and technical analysis, modern portfolio theory, and performance evaluation techniques. Through case studies and real-world applications, learners will develop the skills to assess investment opportunities, build diversified portfolios, and make informed decisions. Ideal for finance enthusiasts and professionals, this course equips participants with the analytical tools and strategic insights to navigate complex investment landscapes effectively.

Course Objectives:
On completion of this course, learners will be able to

- Get a basic understanding of fundamental concepts of investment scenarios, financial markets, instruments, market participants and their roles
- Gain knowledge with respect to valuation and analysis techniques of financial instruments and investment scenarios, and the various theories and techniques used in the portfolio management
- Be able to apply the relevant tools and techniques or do the valuation and analysis of financial instruments and investment scenarios in real life situations
- Be able to understand the working knowledge of portfolio management
- Be able to apply relevant tools and techniques or theories for valuation, or to do the selection, evaluation and revision of portfolios in real life situations.

Unit No	Detailed Syllabus
Unit 1	**Financial Investment – A Conceptual Framework:** A Conceptual Framework: Investment process, risks of investment and the common mistakes made in investment management.

Unit 2	**Investment Environment:** Features and composition of money market and capital market, money market, capital market instruments and financial derivatives, Stock Market in India, Markets for Securities.
Unit 3	**Risk and Return:** Concepts of risk and return, how risk is measured in terms of standard deviation and variance, the relationship between risk and return.
Unit 4	**Fundamental Analysis:** Economy analysis, industry analysis and company analysis, weaknesses of fundamental analysis.
Unit 5	**Technical Analysis:** Tools of technical analysis, important chart formations or price patterns and technical indicators.
Unit 6	**Efficient Market Hypothesis:** Concept of 'Efficient Market' and its implications for security analysis and portfolio management
Unit 7	**Behavioral Finance:** Meaning of behavioral finance, deals with when, how and why psychology influences investment decisions.
Unit 8	**Valuation of Bonds and Shares:** Elements of investment, bond features and prices, call provisions on corporate bonds, convertible bonds and valuation of bonds.
Unit 9	**Portfolio Management: Risks and Returns**: Concept of portfolio and portfolio management, concept of risk, types of portfolio management.
Unit 10	**Markowitz Portfolio Selection Model:** Concept of portfolio analysis and diversification of risk. Also discusses Markowitz Model and Efficient Frontier.
Unit 11	**Capital Asset Pricing Model (CAPM):** Deals with the assumptions of CAPM and the inputs required for applying CAPM and the limitations of this Model.
Unit 12	**Sharpe-The Single Index Model:** Measurement of return on an individual stock, measurement of portfolio returns and measurement of individual stock risk.
Unit 13	**Factor Models and Arbitrage Pricing Theory:** Arbitrage Pricing Theory and its principles, Comparison of Arbitrage Pricing Theory with the Capital Asset Pricing Model.
Unit 14	**International Portfolio Investments:** Investment avenues for foreign portfolio investors, risks and returns associated with such investment.

Reference books:

- Bodie, Z., Kane, A., & Marcus, A. J. (2021). *Investments* (12th ed.). McGraw-Hill Education.
- Graham, B., & Dodd, D. (2008). Security analysis (6th ed.). McGraw-Hill Education
- Chandra, P. (2017). *Security analysis and portfolio management* (2nd ed.). McGraw-Hill Education India.
- Reilly, F. K., & Brown, K. C. (2012). *Investment analysis and portfolio management* (10th ed.). Cengage Learning.
- Graham, B., & Dodd, D. (2008). *Security analysis* (6th ed.). McGraw-Hill Education.

- Damodaran, A. (2012). *Investment valuation: Tools and techniques for determining the value of any asset* (3rd ed.). Wiley.

COURSE CODE-DFIN306	**FINANCIAL SERVICES**

Course Description: This course on *Financial Services* provides an in-depth exploration of the dynamic financial sector, focusing on its structure, functions, and key components. Students will examine various financial services, including banking, insurance, mutual funds, leasing, credit rating, and investment advisory. The course highlights the regulatory environment, emerging trends such as fintech, and the role of financial institutions in economic development. Through real-world case studies and practical examples, learners will gain insights into service innovation, risk management, and customer relationship strategies. This course is designed to equip future finance professionals with the knowledge and skills to navigate and excel in the evolving financial services landscape.

Course Objectives:
On completion of this course, learners will be able to

- Understand and describe the nature and importance of financial services and its role in economic development.
- Analyze the importance and functions intermediating institute like merchant banks and credit rating in helping the business organization and investors to meet their objectives and make the right decisions.
- Describe the various services provided by the different institutions and analyze the features of different instrument so that the organization as well as the investors can decide the appropriate instrument for them.
- Acquire the skills necessary to participate in managing a financial service company.

Unit No	**Detailed Syllabus**
Unit 1	**Financial Service:** Concept, Objectives, Growth of financial services in India, Problems, Regulatory Framework.
Unit 2	**Money Market Related Financial Services**: Concept, process, organization, advantages, Product features, Advantages, Regulation of Mutual funds, Association of Mutual Funds.
Unit 3	**Plastic Money:** Introduction, Insurance, Re-Insurance, Life Insurance, General Insurance, Regulation of Insurance
Unit 4	**Public Issue Management:** Introduction, Activities involved in public issue management, SEBI guidelines, Issue Manager - role, Public Issue proposal.
Unit 5	**Underwriting of Securities:** Concept, Benefits of Underwriting, SEBI Guidelines.
Unit 6	**Portfolio Management Services:** Concept, functions, strategies, Portfolio manager and his roles.

Unit 7	**Consumer Finance:** Concept, types of consumer finance, Advantages & Disadvantages of Consumer Finance, Demand for consumer finance.
Unit 8	**Venture Capital:** Concept, rationale, methods of evaluation, stages of venture capital financing.
Unit 9	**Credit Rating:** Concept, Credit Rating Process, Advantages of Credit Rating, Issues related with Credit Rating.
Unit 10	**Merchant Banks:** Concept, Function, Code of Conduct, Regulatory Framework.
Unit 11	**Capital Asset Pricing Model:** Deals with the Assumptions of CAPM, Inputs required for applying CAPM, Limitations of CAPM
Unit 12	**Investment Banking:** Introducing Investment Banking, Purpose of Investment Banking
Unit 13	**Leasing and Hire Purchase:** Concept of Leasing, Features of Leasing, Types of Leasing, Process of Leasing, Advantages/Disadvantages of Leasing, Concept of Hire Purchase. Rights of Hirer, Leasing Vs Hire Purchase
Unit 14	**Factoring & Forfeiting:** Concept, Mechanism of Factoring, Types of Factoring, Factoring vs Forfeiting

Reference books:

- Kothari Rajesh, Financial Services in India, SAGE Publishing, Latest Edition.
- E. Gordon & K. Natrajan, Financial Markets and Services, JBA, 10th Edition, 2016.
- M Y Khan, Financial Services, 5th Edition, Tata McGraw Hill, Latest Edition.
- Pathak, The Indian Financial System, , Pearson Education, Latest Edition.

COURSE CODE-DFIN307	**FINANCIAL STATEMENT ANALYSIS**

Course Description: This course on *Financial Statement Analysis* offers a comprehensive guide to understanding and interpreting financial statements for effective decision-making. Students will learn to analyze balance sheets, income statements, and cash flow statements to assess a company's financial health and performance. Key topics include ratio analysis, trend analysis, and evaluating liquidity, profitability, and solvency. The course also explores advanced concepts such as earnings quality, forecasting, and financial statement manipulation. Through practical case studies and real-world applications, learners will develop the analytical skills needed to evaluate investment opportunities, creditworthiness, and organizational performance, preparing them for careers in finance, accounting, and management.

Course Objectives:
On completion of this course, learners will be able to

- Get a basic understanding of fundamental concepts of investment scenarios, financial markets, instruments, market participants and their roles.

- Gain knowledge with respect to valuation and analysis techniques of financial instruments and investment scenarios, and the various theories and techniques used in the portfolio management.
- Be able to apply the relevant tools and techniques or do the valuation and analysis of financial instruments and investment scenarios in real life situations.
- Be able to understand the working knowledge of portfolio management.
- Be able to apply relevant tools and techniques or theories for valuation, or to do the selection, evaluation and revision of portfolios in real life situations.

Course Contents:

Unit No	Detailed Syllabus
Unit 1	**Introduction to the concept of Regulation of Financial Statements:** Role of the International Accounting Standards Committee Foundation, Various International Accounting Standards (IAS) and International Financial Reporting standards (IFRS).
Unit 2	**The Concept of Fair Presentation, Financial Statements:** Income statement, Statement of comprehensive income, Statement of financial position.
Unit 3	**Financial Modelling for Project Appraisal:** Use of Functions like Net Present Value (NPV), Internal Rate of Return (IRR), etc., Forecasting techniques.
Unit 4	**The Analysis of the Statement of Shareholders' Equity:** Reformulating the Statement of Owners' Equity, Comprehensive Income Reporting, Financial Analysis – ratio analysis and report writing.
Unit 5	**The Analysis of the Balance Sheet and Income Statement:** Reformulation of the Balance Sheet, Reformulation of the Income Statement (Tax allocation, issues in reformulating income statements), Relevant ratio Analysis
Unit 6	**The Comparative analysis of the Balance Sheet and Income Statement**: (Common size analysis; trend analysis), Year to year, peer to peer and industry to company.
Unit 7	**Analysis of Cash Flow Statement:** Introduction, Concepts and Framework, GAAP Statement of Cash Flows, Reformulated Cash Flow Statements, Analysis of Cash Flow Statement and Quality of Earnings, Cash Flows and Cash Flow Management
Unit 8	**The Analysis of Profitability:** Du Point Analysis, cutting to the Core of Operations (the analysis of profitability), Distinguishing financing and operating activities and the effect of leverage, Drivers of operating profitability, Profit margin drivers; turnover drivers; borrowing cost drivers.
Unit 9	**Analysis of Growth and Sustainable Earnings:** Introduction, Conceptual Foundations of Growth and Sustainable Earnings, Growth Analysis, Analysis of Changes in Profitability and Sustainable Earnings, Analysis of Changes in Operations, Issues in Identifying Sustainable Earnings, Operating Leverage

Unit 10	**Analysis of Changes in Financing:** The Analysis of Growth in Shareholders' Equity, Growth, Sustainable Earnings, Evaluation of P/B Ratios and P/E Ratios, Articulation of price-to-book ratios and trailing P/E ratios, Training Price-Earnings Ratios and Transitory Earnings, P/E Ratios and Analysis of Sustainable Earnings.
Unit 11	**Business Valuation Basics, Principles and Techniques:** DCF, Multiple methods, accounting based valuation, Asset Valuation; Earning Valuation; Cash flow valuation; Other valuation basis.
Unit 12	**Valuation in Mergers and Acquisitions:** Assets and Cash Flows – strengths and weaknesses of various valuation methods, Recognition of interest of various stakeholders, Selection of appropriate cost of capital for valuation, Synergistic benefits, Forms of Consideration and terms of acquisitions.
Unit 13	**Post-merger Integration Process:** Implications of regulations for business combinations, Types of exit strategies and their implications, Shareholder Value Analysis, Exchange Ratio- Bases used for Computation.
Unit 14	**Fair Value in Accounting Measurement:** Measurement techniques and standards, Challenges, Accounting treatment.

Reference books:

- Krishna G. Palepu & Paul M. Healy- Business Analysis and Valuation using Financial Statements.
- Dr. John Robertson - Financial ratio analysis - John Robertson publishers.
- Wiley IFRS standards, PKF International Ltd, 2025.
- Valuation: Measuring and Managing the Value of Companies, Tim Koller, Marc Goedhart & David Wessels, 8th Edition, 2025.

COURSE CODE-DFIN308	**INTERNATIONAL FINANCIAL MANAGEMENT**

Course Description: This course on *International Financial Management* explores the complexities of managing finance in a global context. Students will examine key concepts such as foreign exchange markets, international capital budgeting, risk management, and cross-border investment strategies. The course delves into topics like exchange rate determination, hedging techniques, multinational capital structures, and the impact of international financial institutions. Through case studies and real-world scenarios, learners will develop the skills to navigate financial challenges in diverse economic environments. Designed for future finance professionals, this course equips participants with the knowledge and tools to make strategic decisions in the dynamic landscape of international finance.

Course Objectives:

On completion of this course, learners will be able to

- To understand the functioning of the foreign exchange market and international financial markets
- To assess the feasibility of cross-border investment opportunities
- To foresee and identify the risks arising out of exchange rate volatility and develop strategies to manage them
- To be aware of the various types of financing available for foreign trade

Course Contents:

Unit No	Detailed Syllabus
Unit 1	**International Financial Management:** Globalization', goals of International Financial Management.
Unit 2	**Balance of Payments:** concepts and principles of balance of payments and its various components. The Current Account Deficit and Surplus, Capital Account Convertibility.
Unit 3	**Foreign Exchange Market:** origin of the concept of foreign exchange, the difference between fixed and floating rates. Foreign exchange transactions and the derivative instruments traded in foreign exchange market such as forwards, futures, swaps, and options.
Unit 4	**Currency Derivatives:** Forward markets and the different concepts, currency futures markets and currency options markets and functions.
Unit 5	**Exchange Rate Determination:** Exchange rate movements, factors that influence exchange rates, movements in cross exchange rates, concepts of international arbitrage, interest rate parity, purchasing power parity and the International Fisher effect.
Unit 6	**International Financial Markets:** Basic concepts of the international money market. International credit markets (loans in various forms) from the creditors/investors.
Unit 7	**Foreign Trade Finance:** Concept of foreign trade finance. Concepts of financing exports & imports, documentary collections, factoring, forfeiting and countertrade.
Unit 8	**Nature and Measurement of Foreign Exchange Exposure:** nature and measurement of foreign exchange exposure. Types of exposures and the various types of translation methods
Unit 9	**Management of Foreign Exchange Exposure:** concept of exposure forward and foreign exchange exposure, various tools and techniques of foreign risk management and the risk management products.
Unit 10	**International Capital Structure**: International capital structure, cost of capital, the capital structure of MNCs, cost of capital in segmented versus integrated markets.

Unit 11	**International Capital Budgeting:** Introduction to international capital budgeting, adjusted present value model, capital budgeting from parent firm's perspective and expecting the future expected exchange rate analysis.
Unit 12	**Country Risk Analysis:** country risk factors, assessment of risk factors. Techniques through which the country risks can be assessed as well as measured
Unit 13	**International Taxation:** international tax system, principles of taxation, double taxation, tax havens and transfer pricing. International tax management strategy and Indian tax environment.
Unit 14	**Foreign Direct Investment, International Portfolio and Cross-Border Acquisitions:** flow, cost and benefits of Foreign Direct Investment, ADR and GDR, concept of portfolio, cases on cross border acquisitions.

Reference books:

- Multinational Financial Management, Alan C. Shapiro, Wiley India Private Limited.
- International Financial Management, P.G. Apte, McGraw Hill Education.

Marketing Management

Course Code- DMKT305	**Sales and Distribution Management**

Course Description:
This course offers a comprehensive examination of sales and distribution management, covering both foundational concepts and advanced practices. The course delves into personal selling processes, including preparation, the buying decision process, and sales forecasting and budgeting. Additionally, the course addresses distribution management, including channel design, management, and performance measurement, with a focus on e-commerce and logistics.

Course Objectives:
On completion of this course, learners will be able to:
- To define key terms and concepts related to sales management and distribution management.
- To explain the roles and skills of modern sales managers and the importance of effective sales management.
- To implement sales forecasting techniques and budget development methods to support sales planning.
- To analyze sales data to evaluate forecast accuracy and the effectiveness of sales strategies and tactics.
- To develop a comprehensive sales management plan, including strategies for motivating and compensating the sales force and managing sales territories.
- To integrate sales and distribution management concepts to create a cohesive approach to market penetration and customer engagement.

Course Contents:

Unit No.	Detailed Syllabus
Unit 1	**Introduction to Sales Management:** Introduction, Evolution of Sales Management, Nature and Importance of Sales Management, Roles and Skills of Modern Sales Managers, Careers in Sales Management.

Unit 2	**Sales Management Positions:** Sales objectives, Strategies and Tactics, Linking Sales and Distribution Management.
Unit 3	**Introduction to Personal Selling:** Buying decision process, Approaches to Personal Selling, buying situations, Sales Planning, Managing the Sales Force
Unit 4	**Sales Forecasting & Budgeting:** Sales planning, developing sales forecast, Forecast accuracy.
Unit 5	**Sales budgets:** Management of Sales Territories: Defining sales territories, Procedure of designing sales territories, assigning salespersons to territories, Managing territorial coverage.
Unit 6	**Sales quotas:** Organizing and Staffing the Sales Force, Sales force training, Concept of sales organization, Size of the sales force, Staffing the sales force, Sales Call Script, Objection handling and Sales Closing Techniques.
Unit 7	**Negotiation, Motivating, and Compensating Sales Personnel:** Motivating and Compensating Sales Personal, Selection and Placement of Sales Personnel.
Unit 8	**Sales Budgeting:** Approaches and Techniques, Development of Sales Force and Sales Organization.
Unit 9	**Evaluation of Sales Personnel:** Sales control and cost analysis, Sales Ethics.
Unit 10	**Introduction to Distribution Management:** Distribution network management, Evolution of Distribution Channels, Retailing, wholesaling, Measuring Wholesale Performance, Franchising.
Unit 11	**Channel Design and Distribution Management:** Channel Management, Channel Information System, Designing, Customer-oriented Logistics Management, E-commerce and Distribution Channel Management.
Unit 12	**Logistics and Supply Chain Management (SCM):** Performance Measures, Information System, Assessing Performance of Marketing Channels, Managing Channel Member Behaviour.
Unit 13	**Channel Management Strategies:** Managing the International Channels of Distribution, Designing and implementing a winning go-to-market strategy- channel stewardship.
Unit 14	**Advanced Sales and Distribution Management:** Manage conflicts, Balancing customers' needs with distribution channel's capabilities, Route-to-market Optimization, New product distribution strategy, Leveraging data and technology in sales and distribution management. Recent Trends in Supply Chain Management: Introduction, New Developments in Supply Chain Management.

Reference books:

- Ingram, T. N., LaForge, R. W., Avila, R. A., Schwepker, C. H., & Williams, M. R. (2022). *Sales management: Analysis and decision making* (11th ed.). Routledge.
- Jobber, D., & Lancaster, G. (2022). *Selling and sales management* (11th ed.). Pearson.
- Havaldar, K. K., & Cavale, V. M. (2021). *Sales and distribution management: Text and cases* (4th ed.). McGraw-Hill Education.
- Rosenbloom, B. (2022). *Marketing channels: A management view* (9th ed.). Cengage Learning.
- Christopher, M. (2022). *Logistics & supply chain management* (6th ed.). Pearson.

Course Code- DMKT306	**Consumer Behavior**

Course Description:

The course of Consumer Behavior equips students with basic knowledge about the issues and dimensions of consumer behavior and with the skill and ability to analyse consumer information and develop consumer behavior-oriented marketing strategies. It helps in determining the variables that influence consumer purchase behavior in the marketplace and thus helps in designing marketing strategies and marketing mix of the product offering.

Course Objectives:

On completion of this course, learners will be able to:

- To define fundamental concepts and terminology related to consumer behaviour.
- To describe the key theories and models of consumer behaviour.
- To explain the influence of psychological and social factors on consumer behaviour.
- To apply consumer behaviour theories to develop marketing strategies for specific consumer segments.
- To analyze consumer behaviour data to identify trends and insights.
- To evaluate the effectiveness of marketing campaigns based on consumer behaviour analysis.
- To create a comprehensive marketing plan using insights from consumer behaviour research.

Course Contents:

Unit No.	Detailed Syllabus
Unit 1	**Introduction to Consumer Behaviour and Consumer Research:** Introduction, Consumer Behaviour – Meaning and Characteristics of Consumer and customers, buyers and users, Organisation Buyers and Development of Marketing Concept, Consumer Behavior and its Applications in Marketing, Consumer Behaviour Research Methods, Consumer Research Process.
Unit 2	**Introduction, Requirements and Basis of Market Segmentation:** Market Segmentation and Strategic Targeting: How consumer behavior variables provide framework for strategically planning the STP, Introduction to product positioning and positioning strategy, Positioning approaches and Positioning errors, Steps in Product Positioning.
Unit 3	**Consumer Motivation:** Introduction, Needs and Goals, Motivational Conflict, Defense Mechanisms, Motive Arousal, Motivational Theories, Maslow's hierarchy of needs, Motivation as a psychological force, The dynamics of motivation Types, Motivation Research, The measurement of motives, Culture and need states.
Unit 4	**Consumer Personality:** Introduction, Self-concept, Personality Theories, Brand Personality, emotions, Personality and understanding consumer behavior, Self and Self Image, Virtual Personality or self.
Unit 5	**Consumer Perception:** Introduction, Sensation (Exposure to Stimuli), Perceptual Selection, Perceptual Organisation, Factors that Distort Individual Perception, Price Perceptions, Perceived Product and Service Quality, Consumer Risk Perceptions, Elements of Perception, Consumer Imagery.
Unit 6	**Consumer Learning, Memory and Involvement:** Introduction, Components of Learning, Behavioral Theory, Cognitive Learning Theory, Passive Learning, Outcomes and Measures of Consumer Learning, Dimensions of Involvement, Involvement and Types of Consumer Behaviour, Cognitive Response Model, Elaboration Likelihood Model, Social Judgment Theory, Brand Loyalty and Brand Equity.
Unit 7	**Consumer Attitudes:** Introduction, Functions of Attitude, Attitude Models, Factors that Inhibit Relationship Between Beliefs, Feelings and Behaviour, Learning Attitudes, Changing Attitudes, Attitude Change Strategies, Theories of Attitude and Market Implications.
Unit 8	**Consumer Behaviour and Marketing Communications:** Introduction, Marketing Communication Flow, Communications Process, Interpersonal Communication, Persuasive Communications, source, message, message appeals, communication feedback.
Unit 9	**Culture Influences on Consumer Behaviour:** Introduction, Characteristics of Culture, Values, Sub-cultures, Cross-cultural Influences, Cultural Differences in Non-verbal Communications, Cultural aspects of Emerging Markets
Unit 10	**Diffusion of Innovation:** Introduction, Types of Innovation, Diffusion Process, Factors Affecting the Diffusion of Innovation, The Adoption Process, Time Factor in Diffusion Process, Culture, Communication and Diffusion, Elements and Market Implications of Consumer Adoption Process.
Unit 11	**Social Class and Group Influences on Consumer Behaviour:** Introduction, nature of Social Class, Social Class Categories, Socialization and related roles of family members, Family decision making and

	consumption related roles, Social Class, The measurement of social class, Lifestyle profiles and social classes Impact of Social Class on Consumer Behaviour.
Unit 12	**Situational Influence on Consumer's Decision and the Decision Models:** Introduction, Nature of Situational Influence, Situational Variables, Types of Consumer Decisions, Nicosia Model of Consumer Decision-making (Conflict Model), Howard-Sheth Model (also called Machine Model), Engel, Blackwell, Miniard Model (also called Open System).
Unit 13	**Consumer Decision-Making Process – Problem Recognition, Information Search and Evaluation of Alternatives:** Introduction, Problem Recognition, Information Search, Evaluation of Alternatives, Factors of Consumer Decision Making and Importance of Pricing.
Unit 14	**Consumer Decision-making Process, Marketing Ethics, and Consumerism:** Schiffman and Kanuks Model of Consumer Decision Making, Belch model, Marketing Ethics and Social Responsibility: Exploitive targeting, Manipulating consumers, Social Responsibility. Consumerism - Consumer rights and Marketers' responsibilities.

Reference books:

- Schiffman, L. G., & Wisenblit, J. (2023). *Consumer behavior* (13th ed.). Pearson.
- Solomon, M. R. (2022). *Consumer behavior: Buying, having, and being* (13th ed.). Pearson.
- Hoyer, W. D., MacInnis, D. J., & Pieters, R. (2021). *Consumer behavior* (7th ed.). Cengage Learning.
- Mothersbaugh, D. L., Hawkins, D. I., & Kleiser, S. B. (2023). *Consumer behavior: Building marketing strategy* (15th ed.). McGraw-Hill Education.
- Blythe, J. (2021). *Consumer behaviour* (3rd ed.). SAGE Publications.

COURSE CODE- DMKT307	**RETAIL MARKETING**

Course Description:
This course on *Retail Marketing* provides a comprehensive understanding of the principles and strategies essential for success in the dynamic retail sector. Students will explore key concepts such as consumer behavior, retail market segmentation, and the development of effective marketing mixes. The course covers topics like store layout, merchandising, pricing strategies, branding, and the role of digital marketing in retail. Through case studies and practical examples, learners will gain insights into retail operations, customer relationship management, and competitive positioning. Ideal for future retail professionals, this course equips participants with the skills to create compelling retail experiences and drive business growth.

Course Objectives:
On completion of this course, learners will be able to:

- To understand the fundamental concepts, structure, and economic significance of retailing in both Indian and global contexts.
- To analyze retail marketing environments, segmentation, targeting, and positioning strategies for effective retail decision-making.
- To evaluate retail location, layout planning, merchandising, and private branding strategies for building competitive advantage.
- To examine customer relationship management (CRM), integrated marketing communication (IMC), and emerging trends such as e-tailing and technology in retailing.
- To assess international and rural retailing dynamics, including market entry strategies, challenges, and growth opportunities.

Course Contents:

Unit No.	Detailed Syllabus
Unit 1	**Introduction to Retailing:** Introduction, Meaning of Retailing, Economic Significance of Retailing, Retailing Management Decision Process, Product Retailing vs. Service Retailing, Types of Retailers, Retailing Environment, Indian vs. Global Scenario.
Unit 2	**Retail Marketing Environment:** Introduction, Understanding the Environment, Elements in a Retail Marketing Environment, Environmental Issues.
Unit 3	**The Retail Marketing Segmentation:** Introduction, Importance of Market, Segmentation in Retail, Targeted Marketing Efforts, Criteria for Effective Segmentation, Dimensions of Segmentation, Positioning Decisions, Limitations of Market Segmentation.
Unit 4	**Retail Consumer Behaviour:** General characteristics of consumers, Buying Behaviour – Types of Buying, Factors influencing CB, Retail Buying Process
Unit 5	**Retail Marketing Strategies:** Introduction, Target Market and Retail Format, Strategy at different levels of Business, Building a Sustainable Competitive Advantage, the Strategic Retail Planning Process, Retail Models, Retail "EST" model.
Unit 6	**Store Location and Layout:** Introduction, Types of Retail Stores Location, Factors Affecting Retail Location Decisions, Country/Region Analysis, Trade Area Analysis, Site Evaluation, Site Selection, Location Based Retail Strategies, Types of Store Layout.
Unit 7	**Merchandise Management:** Introduction, Understanding Merchandising Management, Activities of a Merchandiser, Retail Merchandising Management Process.
Unit 8	**Private Branding in Retail:** Introduction, Difference between a Store/Private, Brand and a National Brand, Growth Drivers of Private Label, Global Scenario of Private Labels, Indian Market Scenario, Advantages of Private Label, Disadvantages of Private Label.
Unit 9	**Integrated Marketing Communication in Retail**: Introduction, Understanding Integrated Marketing Communication, Elements of Communication Process, Communication Plan - Integrated marketing process, Tools of IMC, Upcoming tools of IMC, Factors influencing the Increased use of sales promotion.
Unit 10	**Retail Pricing:** Introduction, Establishing Pricing Policies, Factors Influencing Pricing, Pricing Strategies, Psychological pricing, Mark-up and Mark-down Pricing
Unit 11	**Customer Relationship Management in Retailing:** Introduction, Benefits of Relationship Marketing, Management of Relationship, Principles of CRM, Customer Relationship Management Strategies, Components of CRM, Customer Service in Retailing, CRM and Loyalty Program.
Unit 12	**International Retailing:** Introduction, Stages in Retail Global Evolution, Reasons for Going Global, Benefits of Going Global, Other Opportunities and Benefits of Going Global, Market Entry Methods.
Unit 13	**E-Tailing:** Introduction: E-tailing, Role of Technology in Satisfying Market Demand, Technology in Retail Marketing Decisions, Structure and Developments in E-tailing, Factors Influences the Growth of E-Tailing, Advantages and Disadvantages of E-Tailing, Future of Electronic Retailing
Unit 14	**Rural Retailing:** Introduction, an Overview of the Indian Rural Market, Role of Rural retailing in India, Challenges in Indian Rural Market, Periodic Markets (Shanties/Haats/Jathras), Rural retail Players in India, Rural Retail Strategies, Future of Rural retailing.

Reference Books:

- Levy, M., Weitz, B. A., & Grewal, D. (2022). *Retailing management* (11th ed.). McGraw-Hill Education.
- Berman, B., Evans, J. R., & Chatterjee, P. (2023). *Retail management: A strategic approach* (14th ed.). Pearson.
- Newman, A., & Cullen, P. (2021). *Retailing: Environment and operations* (13th ed.). Cengage Learning.
- Gibson, G., & Vedamani, G. G. (2022). *Retail management: Functional principles and practices*. Jaico Publishing House.
- Kent, T., & Omar, O. (2021). *Retailing* (3rd ed.). Palgrave Macmillan.

COURSE CODE: DMKT308	MARKETING RESEARCH

Course Description

Building on Principles of Research Design, this course aims to extend and deepen the understanding of different research approaches and methodologies to prepare students for their own research projects in their business discipline. This course will assist students in identifying, discussing and formulating a research problem, in selecting and applying appropriate research approaches and methods of inquiry (both quantitative and qualitative), and in presenting their results. To keep research projects on track, it helps them set realistic time frames, assign resources appropriately and manage quality to decrease research errors.

Course Objectives

On completion of this course, learners will be able to:

- Understand the concept, significance and purpose of research.
- Identify a problem/need, translate it into a research problem.
- Identify and understand the main qualitative and quantitative methods of business research.
- Understand the various types of sampling techniques.
- Develop skills of quantitative data analysis and interpretation of its results.

Course Contents:

Unit No.	Detailed Syllabus
Unit 1	**Introduction to Research:** Introduction to research, Meaning of Markert Research & Marketing Research, Role of Marketing Research in Marketing Management, Purpose of Research, Characteristics of Good Research, Nature and Scope of Marketing Research, Marketing Research in the 21st Century (Indian Scenario), Marketing Research: Value and Cost of Information.
Unit 2	**Types of Research:** Process of Marketing Research, Ethical Issues in Marketing Research, Nature & contents of Ethical Issues.
Unit 3	**Branches of Marketing Research: Consumer Research** - Meaning & Scope, Need, Functions.
Unit 4	**Product Research & Advertising Research:** Meaning & Scope, Importance. Advertising Research - What to Test, When to Test.
Unit 5	**Media Research:** Functions of Media Research. Motivational Research - Meaning uses & Limitations. Techniques - Marketing Research in India.
Unit 6	**Marketing Research Proposal:** Meaning, Elements of Research Proposal
Unit 7	**Formulation of Research Problem:** Introduction, Meaning of Research Problem, Guidelines and Criteria for Selecting a Research Problem, formulating a Research Problem, Techniques for Formulating a Research Problem
Unit 8	**Research Design:** Introduction, Meaning of Research Design, Marketing Research Design – Its Meaning, Its Importance, Characteristics of Good Research Design, Concepts related to Research Design, Types of Research Design.
Unit 9	**Scales of Measurement:** Meaning of Measurement in Marketing Research: criteria of sound Measurement of Marketing Research, Introduction, Importance of Measurement and Scaling in Marketing Research, Scales of Measurement: Fundamental Properties, Primary Scales of Measurement, Attitude Measurement Scales, Types of Comparative Scales, Non – Comparative scale, Selecting an Appropriate Scale, Scale Evaluation.
Unit 10	**Sample Selection:** Introduction, Meaning of sampling, Importance and Advantages of Sampling, Census vs. Sample, Characteristics of Good Sample, Sampling Techniques, Criteria for Selection of a Sampling Technique, steps of sampling process, Types of sampling plans.
Unit 11	**Data Collection:** Introduction, Sources of Data, Primary Data Collection Techniques, Secondary Data Collection Techniques, Secondary Data – Advantages and Disadvantages, Qualitative vs. Quantitative Data.

Unit 12	**Questionnaire Design:** Introduction, Types of Questionnaire, Methods of Sending the Questionnaire, Guidelines for Questionnaire Design, Characteristics of Good Questionnaire.
Unit 13	**Data Processing:** Introduction, Editing, Coding the Data, Tabulation, Quantitative and Qualitative Analysis, Introduction, Statistics in Data Analysis, Measures of Central Tendency, Measures of Dispersion, Bivariate Analysis, Multivariate Analysis, Descriptive Statistics, Univariate Analysis, Correlation analysis, analysis of variance and analysis of covariance, Conjoint analysis.
Unit 14	**Analysis, Interpretation and Presentation of Findings:** Introduction, Statistical Analysis and Interpretation, Techniques of Interpretation, Meaning of Marketing Research Report, Report Writing Steps, Components and Format of Research Reports, Guidelines for Writing Research Reports, Recent Trends in Marketing Research: Introduction, Marketing Information System and Research, Online Marketing Research, Research in Lifestyle Retail, Marketing Research and Social Marketing, Rural Marketing Research, Trends in Services Marketing Research, Brand Equity Research, International Marketing and Branding Research.

Reference Books:

- Malhotra, N. K., Nunan, D., & Birks, D. F. (2022). *Marketing research: An applied approach* (6th ed.). Pearson.
- Hair, J. F., Page, M., & Brunsveld, N. (2022). *Essentials of business research methods* (5th ed.). Routledge.
- Burns, A. C., Veeck, A., & Bush, R. F. (2023). *Marketing research* (9th ed.). Pearson.
- Zikmund, W. G., Babin, B. J., Carr, J. C., & Griffin, M. (2021). *Business research methods* (10th ed.). Cengage Learning.
- Gupta, S., & Gupta, H. (2021). *Marketing research* (Indian ed.). McGraw-Hill Education

Human Resource Management

COURSE CODE-DHRM305	**HUMAN RESOURCE PLANNING**

Course Description:

The Human Resource Planning course provides a thorough understanding of how to match workforce requirements with organisational goals. It includes important areas such as predicting workforce needs, managing talent, and planning for the future. Participants will gain the skills to recognise upcoming HR needs, fill staffing shortages, and efficiently oversee human resources to improve organisational effectiveness.

Course Objectives:

On completion of this course, learners will be able to

- Understand the fundamental concepts and significance of Human Resource Planning.
- Analyze workforce forecasting techniques and manpower planning models.
- Apply HR planning strategies for recruitment, selection, and resource allocation.
- Evaluate HR tools such as HRIS, competency mapping, selection techniques, career management, and retention strategies.
- Assess emerging trends and challenges in Human Resource Planning.

Course Contents:

Unit No.	Detailed Syllabus
Unit 1	**Manpower Planning and Sourcing:** Introduction, Factors Affecting Human Resource Planning, Need for and importance of Human Resource Planning, Steps in Human Resource Planning and Challenges in Human Resource Planning.
Unit 2	**Manpower Forecasting:** Introduction, Forecasting, Necessity for forecasting, Steps in forecasting, Demand Forecasting techniques, Forecasting accuracy, Benefits of forecasting, Human Resource Supply Estimates. Use and Applicability of Statistical and Mathematical Models in Manpower Planning, Cohort Analysis, Census Analysis, Markov Models, Gap Analysis, Action Plans – Separation, Retention, Training, Redeployment & Staffing. Career and Succession planning.
Unit 3	**Role of Human Resource in Manpower Planning:** Introduction, Key Human Resource elements, Requisite Inputs provided by HR. Role of HR in Strategic Human Resource Planning, Functions of HR in Manpower Planning for Organisational Success.
Unit 4	**Human Resource Accounting:** Introduction, Definition of Human Resource Accounting, Need, Significance, Objectives for HRA, Advantages of HRA, Methods of HRA, Objections to HRA, Controlling Manpower Costs, True Costs of Planning and Recruitment, Human Resource Accounting in India.
Unit 5	**Developing a Manpower Plan:** Introduction, developing a Manpower Plan, Qualitative Side of Human Resource Planning, Behavioural Event Interviewing, Standard Interviews, Competency Mapping (Skill Inventory), Problems in Manpower Planning, Sample Manpower Plan, Running Enterprises With No Major Expansion Plan, Running Enterprises with Major Expansion Plans for Expansion, Modernisation, Diversification etc., Challenges of Manpower Planning Formulation Related to Old and New Enterprise.
Unit 6	**Manpower Sourcing and Recruitment:** Introduction, Sources of candidates, Recruitment, Outsourcing, Attracting candidates, E-Recruitment, Person specifications
Unit 7	**Resourcing Strategy:** Introduction, Components of Resourcing Strategy, Business Scenario Planning, Estimating Future Human Resource Requirements, Labor Turnover, Action Planning, Role of HR in Developing Resource Capability, Resourcing Strategy, Human Resource Information System Its Meaning, Role and Functions, Various Types of Human Resource Information System, Human Resource Information System- Development and Decision Making, Human Resource Information System and Business Strategy.
Unit 8	**Selection Tests:** Introduction, Selection Process, Selection Methods, Psychological tests, Types of tests, Validity of tests, interpreting test results, Psychometric tests, online test, Importance of tests, Interview and Its Types, Interview Process and Interview Questions, Final stages.
Unit 9	**Induction:** Introduction, Benefits of an Induction program, designing an induction program, Documentation, Types of Induction, On-the-Job Training, Induction Checklist, Essential Elements, Sample of Good Induction, Induction Process- Steps, Stages and Induction Programme.
Unit 10	**Talent Development:** Introduction, Policies and approaches, Organizational Training, Role of Training Managers, Essential Skills, Benefits and Tips to be an Effective Training Manager, Job Analysis, Job Description and Job Specification,

	Skills Analysis, Skill Inventory and It's Approaches, Performance Appraisals and Its Types, Manpower Inventory including Quantitative and Qualitative Aspects, Quantitative Determination of Human Resource Requirements- Work Study .
Unit 11	**Talent Engagement:** Introduction and Definition of Talent Engagement, Importance of Talent Engagement, Driving factors of Talent Engagement, Engagement Levels, Talent Engagement Models, Process of Improving Talent Engagement, Talent-Engagement Entrepreneurship and Intrapreneurship
Unit 12	**Career Management:** Introduction, Career management process, Career dynamics, Career management policies, Career planning process, Tips for successful career planning, Talent management, Succession planning, Career Management Model and Addressing Challenges.
Unit 13	**Employee Turnover:** Introduction, Employee turnover – causes and remedies, Cost of employee turnover, Importance of employee turnover, Employee exit process (Managing organizational release, Types and Factors Affecting Employee Turnover
Unit 14	**Train to Hire:** Introduction, Outsourcing the Train-to-Hire Process, partnering with educational institutions, generating revenue, Step in Developing a Training and Hiring Plan, Train and Hire - Model and Sources, setting up an academy, Designing Curriculum
Unit 15	**Recent Trends in Manpower Planning:** Introduction, Competency mapping, Knowledge management, E-Manpower Development, E-Manpower planning, Ways to Adopt Emerging Trends and Overcome Challenges, Job Clarity, Job Enrichment and Job Enlargement, Recent Trends in Organisation Structuring in International Business: Introduction, Business Ethics Factors, International Business and Ethics, National Differences in Ethics.

Reference Books:

- Strategic Human Resources Planning, Monica Belcourt & Mark Podolsky (7th ed.), Nelson Education (2022).
- Agile Workforce Planning, Adam Gibson, Kogan Page (2021).
- Human Resource Management, Gary Dessler (16th ed.), Pearson (2020).
- Strategic Staffing, Jean M. Phillips & Stanley M. Gully (5th ed.), SAGE Publications (2023).

COURSE CODE-DHRM306	**MANAGEMENT AND ORGANIZATIONAL DEVELOPMENT**

Course Description:

This course delves into management and organizational development, emphasizing theoretical frameworks and practical applications. Key topics include Team Development, change management, organizational culture, and strategic planning. Leaners will diagnose organizational challenges, design interventions, and lead change initiatives. The course highlights the critical role of management in fostering innovation, enhancing employee productivity, and aligning organizational systems with long-term strategic goals. Upon completion, participants will possess advanced techniques for implementing organizational development processes.

Course Objectives

On completion of this course, learners will be able to:

- Understand the nature of change, forces for change, resistance to change, and approaches to managing organizational change.
- Analyze the concepts of organizational transformation and transition.
- Examine organizational development programmes, techniques, and emerging OD approaches, along with their applications in organizations.
- Assess the implications of change and apply organizational development techniques to address organizational needs

Course Contents:

Unit No.	Detailed Syllabus
Unit 1	**Organizational Development: An introduction:** Organizational Development – Meaning and Definition, History of OD, Relevance of Organizational Development for Managers, Characteristics of OD, Assumptions of OD , Participation & Empowerment, Teams & Teamwork, Parallel learning structures.
Unit 2	**Change Process and Models:** Organizational Change, Strategies for Change, Theories of Planned Change (Lewin's change model, Action research model, the positive model), Action Research as a Process, Resistance to Change.
Unit 3	**Role of OD Practitioner:** Concept of OD Practitioner, Types of OD Practitioner, Role of OD Practitioner in Organizations, Competencies required for OD practitioners.
Unit 4	**Process of OD:** Process of OD, Components of OD program, OD program phases, Making an Entry, Developing Contract, Launch, Situational Evaluation, Closure.
Unit 5	**Designing Interventions:** OD Interventions, Characteristics of OD Interventions, Levels of Diagnosis in Organisations, OD Map, Factors Affecting Success of Interventions.
Unit 6	**Values and Ethics in OD:** Professional Values, Value Conflict and Dilemma, OD Values and Changing Themes over Time, Ethics in OD, Ethical Dilemmas in Practicing OD, Factors that Influence Ethical Judgement
Unit 7	**Human Process Interventions:** Introduction to OD Interventions (Individual & Group), Team Development Interventions, Interpersonal Development Interventions.
Unit 8	**Human Resource Intervention:** HRM Interventions, Goal Setting, Performance Appraisal, Reward Systems, Career Planning and Development, Managing Workforce Diversity, Employee Wellness.
Unit 9	**Structural Interventions:** Socio-Technical Systems, Techno-Structural Interventions, Physical Settings and OD, Types of Techno-Structural Interventions.
Unit 10	**Strategic Interventions:** Integrated Strategic Change, Trans-organisation Development, Merger and Acquisition Integration, Culture Change, Self-Designing Organisations, Organisation Learning and Knowledge Management, Confrontation Meetings, System 4 Management, Learning Organisations.

Unit 11	**Technology and OD:** Technology & OD: Basic Concept, Impact of Technology in Organisations, Benefits of Using Technology in OD, Guidelines for Integrating Technology in OD Interventions, Tools used in OD.
Unit 12	**Issues Faced in OD:** Introduction, Client-Consultant Relationship, Power, Politics and Organisational Development.
Unit 13	**Evaluating OD Interventions:** Evaluation, Importance of Evaluating Interventions, Types of Evaluation, Methods of Evaluating Interventions
Unit 14	**Organisational Learning:** Learning Organisation, Senge's Approach Nonaka & Takeuchi's Approach, Executive View on Organisational Learning, Reality Checklist, Seven Steps of Initiating Organisational Learning.
Unit 15	**Future of OD:** Organisational Development and Globalization, Emerging Trends in OD, Expanding the use of OD, combining traditional "hard" business competencies and OD, creating whole system change, Using OD to facilitate partnerships and alliances, Enhancing constant learning, Trends within the Organisation.

Textbook:

- Organization Development and Change, Christopher G. Worley, Thomas G. Cummings & Paul Donovan, Cengage Learning (2025)

Reference Books:

- Organization Change: Theory and Practice, W. Warner Burke, SAGE Publications (2023).
- Organizational Development Essentials You Always Wanted To Know: A Complete Guide to OD Interventions, Change Management, and Practitioner Skills, Vibrant Publishers (2021).

COURSE CODE-DHRM307	**INDUSTRIAL RELATIONS**

Course Description:
This course provides a comprehensive understanding of Industrial Relations. It covers key aspects such as trade unions, labour markets, industrial disputes, collective bargaining, and labour laws. The course also examines workplace challenges and the role of various stakeholders in maintaining harmonious industrial relations. Learners will develop analytical and problem-solving skills to effectively manage employee relations and organisational dynamics.

Course Objectives

On completion of this course, learners will be able to

- Understand the fundamentals of industrial relations.
- Gain knowledge on challenges of trade unions, employers' federation.

- Apply problem solving skills to workplace harmony.
- Analyze the impact of globalisation and national trends in industrial relations

Course Contents:

Unit No.	Detailed Syllabus
Unit 1	**Introduction to Industrial Relations (IR):** Concept, scope and importance of Industrial Relations, Approaches to Industrial Relations.
Unit 2	**Indian Labor Market:** Characteristics of the Indian labor market, Labor market trends, challenges, and opportunities
Unit 3	**International Labor Organization (ILO):** Origin, objectives and functions of ILO, conventions and recommendations, Relevance of ILO in Indian context
Unit 4	**Trade Union:** Definitions, functions and objectives of trade unions, Historical evolution of trade unions in India, Types and structures of trade unions
Unit 5	**Globalization and Trade Unions:** Impact of globalization on trade union movements, Strategies for trade union survival and growth in a globalized economy
Unit 6	**Trade Union Recognition and Impunity:** Concept of Trade Union Recognition in India, Criteria for trade union recognition, Rights, duties, and immunities of trade unions under Indian law.
Unit 7	**Employers' Federations:** Introduction to the Employer's Federation, Roles and functions of employers' federations, Overview of key federations: FICCI, ASSOCHAM, CII, and PHDCCI, Application of concepts through simulations and case studies
Unit 8	**Industrial Disputes:** Meaning and causes of industrial disputes, Types of disputes and their impact on industrial relations
Unit 9	**Industrial Relations Machinery:** Mechanisms to resolve industrial disputes: Conciliation, mediation, arbitration, and adjudication
Unit 10	**Collective Bargaining:** Meaning, process, and types of collective bargaining, Challenges and effectiveness of collective bargaining in India
Unit 11	**Workers' Participation in Management (WPM):** Objectives and forms of WPM, Effectiveness and challenges of WPM in Indian industries
Unit 12	**Grievance Handling and Discipline Management:** Definition and importance of grievance handling, grievance redressal process, Discipline, misconduct, and role of disciplinary committees
Unit 13	**Globalization and Industrial Relations (IR):** Development of industrial relations in Asia, Role of Human Resource Development (HRD) in improving industrial relations, Contemporary issues and challenges in IR
Unit 14	**The New Indian Labor Laws:** Overview of the four new labor codes: Code on Wages, 2019, Code on Industrial Relations, 2020, Code on Social Security, 2020, Occupational Safety, Health, and Working Conditions Code, 2020

Reference Books:

- Industrial Relation and Labor Law, Satish Kumar Saha & Anju Agarwal, SBPD Publications (2020).
- Labor Laws and Industrial Relations, G. K. Jha, Notion Press (2022).

- New Labour and Industrial Laws, Taxmann Publications (2023)
- The Law Relating to the Industrial Relations Code, 2020, Saji Narayanan C. K., OakBridge Publishing (2025).
- Industrial Relations and Labour Laws, S. C. Srivastava, Vikas Publishing House.

COURSE CODE-DHRM308	**HR ISSUES IN CORPORATE RESTRUCTURING**

Course Description:
This course emphasises the critical role of Human Resources (HR) in the context of corporate restructuring, including mergers and acquisitions. It examines the challenges and opportunities HR professionals face in aligning human capital strategies with corporate restructuring objectives. Students will explore topics such as employee engagement, change management, cultural integration, leadership transitions, legal and ethical considerations, communication strategies, and workforce planning. Real-world case studies, best practices, and research insights will equip students with the skills and knowledge to effectively manage HR issues in complex restructuring scenarios while supporting organizational goals and sustaining employee well-being.

Course Objectives

On completion of this course, learners will be able to:
- Understand the concepts and processes of corporate restructuring and mergers and acquisitions.
- Analyze the role of human resources in managing restructuring and integration processes.
- Evaluate cultural and change management challenges in corporate restructuring.
- Examine legal and ethical considerations in restructuring decisions.
- Develop communication and leadership strategies for effective restructuring and integration

Course Contents:

Unit No.	Detailed Syllabus
Unit 1	**Introduction to Mergers and Acquisitions (M&A):** Definitions and concepts, Types of M&A (horizontal, vertical, conglomerate, reverse mergers), Key terminologies and lexicon in M&A (General Terms, Operational Terms, Financial Terms, Legal and structural terms, Strategic terms) Current trends in M &A; Famous case study: Exxon-Mobil Merger.
Unit 2	**Organizational Growth through Mergers and Acquisitions:** Role of M&A in achieving corporate growth, Types of Inorganic growth strategies in M&A, Inorganic growth strategies (Horizontal Integration, Vertical Integration, Market Expansion Acquisitions, Product Line Expansion, Roll-Up Strategy, Acquiring

	New Technologies) Benefits, risks, and challenges. Example: Disney-Pixar Acquisition
Unit 3	**Historical Perspective of Mergers and Acquisitions:** Global evolution of Merger and Acquisitions. Evolution of M&A globally and in India, Key historical deals and their lessons, Trends over time (industrial age to digital transformation), Case study: Standard Oil's Monopoly and Breakup.
Unit 4	**Strategic Dimensions of M&A:** Overview of the M&A process (from strategy to integration), Identifying and capitalizing on synergies, Strategic alignment and goal setting, Case study: Google's Acquisition of YouTube.
Unit 5	**Acquisition Perspective:** Understanding the Acquisition Perspective; Strategic and Operational Fit Importance of strategic alignment in M&A, Operational compatibility and integration challenges, Tools for assessing fit (SWOT Analysis, Porter's Five Forces Analysis, Growth-Share Matrix, Discounted Cash Flow (DCF) Analysis, Gap Analysis, Process Mapping), Example: Tata Motors-Jaguar Land Rover Acquisition.
Unit 6	**Exploring Reasons for M&A Failure:** Understanding M & A Failure; Common reasons for failure: financial, cultural, operational.
Unit 7	**Cultural Challenges in Mergers and Acquisitions:** Role of organizational culture in M&A success, Cultural conflicts and misalignment, Managing cross-cultural differences, Example: Lenovo-IBM ThinkPad Acquisition.
Unit 8	**Cultural Due Diligence:** Importance of cultural assessment during due diligence, Frameworks for evaluating cultural compatibility (Hofstede's Cultural Dimensions Theory, Schneider's Cultural Model, Cultural Due Diligence Framework, Goffee and Jones' Double S Model) Steps for bridging cultural gaps, Case study: Vodafone-Hutchison Merger.
Unit 9	**The Indian M&A Scenario:** Overview of M&A activity in India, Regulatory frameworks (Competition Act, SEBI regulations), Recent trends and examples in Indian M&A, Case study: Flipkart-Walmart Deal.
Unit 10	**Integration Strategies and Models in M&A:** Developing effective integration strategies, Integration models: absorption, preservation, symbiosis, holding, Tools and best practices for successful integration, Example: Facebook-Instagram Integration Strategy.
Unit 11	**Stress and Ambiguity in Mergers and Acquisitions M&A:** Psychological impact of M&A on employees, coping with stress and ambiguity, Strategies for managing uncertainty, Case study: HP-Compaq Merger
Unit 12	**Leadership in M&A (Mergers and Acquisitions):** Role of leadership in successful M&A, building trust and driving alignment, Leadership traits and skills required during transitions, Example: Satya Nadella's Role in Microsoft's Acquisitions
Unit 13	**Communication in M&A(Mergers and Acquisitions):** Significance of clear and transparent communication, Strategies for internal and external communication during M&A, Overcoming communication barriers, Case study: Unilever's Acquisition of Dollar Shave Club
Unit 14	**HR Integration in M&A(Mergers and Acquisitions):** Role of HR in post-merger integration, Key factors shaping HR strategies in M&A, HR integration process: planning, execution, and follow-up, Example: Air India-Tata Group HR Integration

Reference Books:

- Mergers and Acquisitions: A Strategic and Practical Guide, Stefano Gatti, Academic Press (2021).
- The HR Practitioner's Guide to Cultural Integration in Mergers & Acquisitions: Overcoming Culture Clash to Drive M&A Deal Value, Klint C. Kendrick (2023).
- The HR Practitioner's Guide to Mergers & Acquisitions Due Diligence: Understanding the People, Leadership, and Culture Risks in M&A, Klint C. Kendrick, M&A Roundtable (2020).
- The HR Practitioner's Guide to Cultural Integration in Mergers & Acquisitions: Overcoming Culture Clash to Drive M&A Deal Value, Klint C. Kendrick (2023).

Analytics and Data Science

COURSE CODE - DADS305	**PROGRAMMING IN DATA SCIENCE**

Course Introduction: This course introduces the foundational programming skills essential for data science. Students will learn to work with key programming languages such as Python or R, focusing on data manipulation, data structures, and libraries for scientific computing. Topics include data input/output operations, functions, and debugging techniques. By the end of the course, learners will be equipped to write clean, efficient code for data analysis and modeling, laying a strong foundation for advanced data science applications.

Learning objectives:

- Create Complex R Programs using Loops.
- Plot Data and Create Informative Visualizations.
- Perform Basic Descriptive Analytics using R.
- Fit Regression Model in the Data.

Unit No.	Detailed Syllabus
Unit I	**Introduction to R:** Installation of R, Installation of R Studio, Setting up R Work Environment, Importing Files in R.
Unit II	**Data Types and Data Structures in R:** Data Types in R, Data Structures in R, Defining Vectors.
Unit III	**Graphing Using ggplot2:** Mapping Plot Aesthetics to Variables; Facet Plotting for Subsets of Data; Plot Geometry; Scatterplots, Bar Charts, Line Charts, Histograms, Box Plots; Statistical Transformations; Position Adjustments and Coordinate Systems; The Layered Grammar of Graphics.
Unit IV	**Tidyverse and Data Manipulation in R:** Tidyverse Library in R; The dplyr Library for Data Manipulation – Select Features, Filter Samples, Chain Functions, Modify Columns, Grouped Data Transformation; The tidyr Library for Data Transformation – Reshape Data, Import and Export Data.
Unit V	**Exploratory Data Analysis in R:** Exploratory Data Analysis Using R – Tutorial.

Unit VI	**Conditional Statements and Loop Structures in R:** If Condition, If-Else Condition, Writing Complex Conditional Statements in R; Writing Loops in R Program; Writing Complex Loop Structures Using R; Enhancing Effectiveness of R Programs Using Complex Loops.
Unit VII	**Simulation Using R In-built Functions:** Simulation Using R In-built Functions – Tutorial.
Unit VIII	**Introduction to Python:** What is Programming; Different Types; Need for Programming; Ways to Execute Python; Getting Started with Python; Introduction to Google Colab.
Unit IX	**Variables, Constructs and Basic Data Structures in Python:** Python Variables – Create Variables, Casting, Expressions and Statements; Python Constructs – Sequential and Conditional Executions; Basic Data Structures – Integer, Float, Strings, Set, List, List Slicing, List Manipulation, List Comprehension, Tuples and Dictionary.
Unit X	**Iterables, Functions and Files in Python:** Iterations (Looping); Functions and Methods – Creating and Accessing; Files – Read, Write and Append Operations.
Unit XI	**Pattern Matching in Python:** Simple Pattern Matching Using Regular Expressions; Complex Pattern Matching Using Regular Expressions.
Unit XII	**Simple Visualization:** Introduction to Visualization – Need, Tools/Libraries, Types; Dot Plot – Representing Data Using Dot Plot; Line Chart – Representing Data Using Line Chart; Bar Chart; Pie and Donut Chart; Waffle Chart; Reading Data from File for Visualization.
Unit XIII	**NumPy:** Array, Array Operations – Index, Slice, View, Reshape, Iterate, Join, Split, Sort, Filter; Operators – Unary, Binary, Universal Functions.
Unit XIV	**Basic and Advanced Pandas:** Pandas Series; Pandas DataFrames – Creating DataFrames, Basic DataFrame Methods; iloc & loc and Use of zip; Importing Data; Combining DataFrames; Handling Strings, Dummies and Missing Values; Data Manipulations – Filtering, Selecting, Sorting; Groupby Operations and Handling Dates.

Reference Book

- Gillespie, Colin, and Robin Lovelace. Efficient R programming: a practical guide to smarter programming. " O'Reilly Media, Inc.", 2016.
- Jones, O., Maillardet, R., & Robinson, A. (2014). Introduction to scientific programming and simulation using R. CRC Press.
- Davies, T. M. (2016). The book of R: a first course in programming and statistics. No Starch Press.

COURSE CODE-DADS306	**EXPLORATORY DATA ANALYSIS**

Course Introduction: This course on *Exploratory Data Analysis* (EDA) focuses on techniques to analyze and summarize data sets, uncovering patterns, trends, and insights. Students will learn to clean, visualize, and interpret data using statistical tools and programming libraries. Key concepts include data preprocessing, outlier detection, and the use of visual and quantitative methods to assess data quality. Through hands-on projects, learners will develop critical skills to make data-driven decisions and prepare data for advanced modeling.

Learning objectives:

- Describe application of Data Science in Different Domains
- Remove Missing Values from the data
- Detect Outliers from the data
- Perform Principal Component Analysis in the Data

Unit No.	Detailed Syllabus
Unit I	**What is Data Science:** Introduction to Data Science, Role of Data Science in Industry, Different Phases of Analytics, Primary and Secondary Data, Data in Different Forms, Overview of Descriptive Analysis, Overview of Exploratory Analysis, Overview of Predictive Analytics.
Unit II	**Applications of Data Science in Different Domains:** Use of Data Science in Banking, Health Care, Logistics, and Marketing.
Unit III	**Descriptive Analysis:** Summary Statistics – Mean, Median, Mode, Standard Deviation, Kurtosis with Real-Life Examples; Measures of Dispersion with Examples.
Unit IV	**Exploratory Analysis:** Visualizing Different Types of Data and Correlations with Demonstration Using Python.
Unit V	**Predictive Analysis:** Regression Line Fitting with Demonstration Using Python.
Unit VI	**Inferential Analysis – I:** Hypothesis Testing – Null and Alternate Hypothesis, One-Tailed and Two-Tailed Tests, t-test, z-test with Examples.
Unit VII	**Inferential Analysis – II:** ANOVA, Chi-Square Test, Wilcoxon Rank-Based Tests with Examples.
Unit VIII	**Feature Engineering – I:** Introduction to Feature Engineering, Machine Learning Pipeline, Cross Tabulation, Feature Selection, Data Transformation and Standardization, Outlier Detection and Handling.
Unit IX	**Working with High Dimensional Data:** Introduction to High Dimensional Data, High Dimensional Data Representation (Images, Text, Audio, and Video), Techniques for Working with High Dimensional Data.
Unit X	**Feature Engineering – II:** Handling Various Unstructured Data – Image Reading, Shaping, Changing, Flattening, Creating Predictor Matrix, Count Vector Representation, TF-IDF Representation, High Dimensionality Reduction Techniques.
Unit XI	**Principal Component Analysis (PCA):** Introduction to PCA, Steps in Performing PCA, Performing PCA Using Python.
Unit XII	**Factor Analysis:** Introduction to Factor Analysis, Steps in Performing Factor Analysis, Performing Factor Analysis Using Python.
Unit XIII	**Linear Discriminant Analysis (LDA):** Introduction to Linear Discriminant Analysis, Discriminant Analysis Concepts, Data Exploration, Discriminant Analysis Modelling.
Unit XIV	**Case Study in Data Science:** Case Study Involving Exploratory Data Analysis Using Python.

Reference Book

- Mukhiya, S. K., & Ahmed, U. (2020). Hands-on exploratory data analysis with Python: Perform EDA techniques to understand, summarize, and investigate your data. Packt Publishing.Statistics for Management and Economics by Gerald Keller, Cengage Learning.
- Sampling Techniques by William G Cochran, Wiley and Sons.
- Wright, J., & Ma, Y. (2022). High-dimensional data analysis with low-dimensional models: Principles, computation, and applications. Cambridge University Press.

Course Code- DADS307	INTRODUCTION TO MACHINE LEARNING

Course Introduction: This course provides an introduction to the fundamentals of machine learning, covering supervised and unsupervised learning techniques. Students will explore key algorithms such as linear regression, decision trees, clustering, and classification models. Topics include model evaluation, overfitting, and bias-variance trade-offs. Practical sessions using tools like Python's Scikit-Learn library will reinforce learning. By the end of the course, learners will understand how to build, train, and assess machine learning models for real-world applications.

Learning objectives:

- Describe the difference between Supervised and Unsupervised Learning
- Perform Different Classification Techniques for Prediction
- Perform Clustering for Data Segmentation
- Build algorithm for Market Basket Analysis

Unit No.	Detailed Syllabus
Unit I	**Introduction to Machine Learning:** What is Machine Learning, Relevance of Machine Learning in Business, Introduction to Supervised Learning and Unsupervised Learning.
Unit II	**Linear Regression – I:** Concept of Linear Regression, Simple Linear Regression, Demonstration Using Python.
Unit III	**Linear Regression – II:** Multiple Linear Regression, Bias and Variance, Regularization Techniques, Demonstration Using Python.
Unit IV	**Logistic Regression:** Concept of Logistic Regression, Logistic Regression Example Using Python.
Unit V	**Support Vector Machine (SVM):** Concept of Support Vector Machine, Understanding SVM Mechanics, SVM Example Using Python.
Unit VI	**Decision Trees:** Classification Using Decision Tree, Code Demonstration for Decision Tree Classification.
Unit VII	**K-Nearest Neighbours (K-NN):** Introduction to K-NN Classification, KNN Algorithm, Distance Measurement Techniques, Selecting Ideal Value for K, Benefits and Weaknesses of KNN, Code Demonstration for K-NN Classification and K-NN Regression.
Unit VIII	**Naïve Bayes Classification:** Introduction to Naïve Bayes Classification, Naïve Bayes Algorithm and Its Working, Code Demonstration for Naïve Bayes Classification.

Unit IX	**Gradient Descent:** Concept of Gradient Descent, Types of Gradient Descent, Hyperparameters, Adaptive Gradient Descent Algorithms.
Unit X	**Ensemble Techniques:** Bagged Trees, Random Forest, AdaBoost, Gradient Boosting, Code Demonstration for Boosting-Based Ensemble Techniques.
Unit XI	**Validation Measures and Model Tuning:** Different Model Validation Measures, Calculation of Validation Metrics, ROC Curve and AUC, Tuning of Machine Learning Models.
Unit XII	**Clustering Techniques:** Introduction to Unsupervised Learning and Clustering, Different Clustering Techniques, K-Means Clustering and Its Implementation Using Python, Hierarchical Clustering and Its Implementation.
Unit XIII	**Recommendation Systems:** Introduction to Recommender Systems, Types of Recommender Systems, Implementing a Basic Recommender System, Apriori Algorithm, Market Basket Analysis, Singular Value Decomposition (SVD).
Unit XIV	**Case Studies in Machine Learning:** Case Studies Related to Business Applications of Machine Learning Techniques.

Reference Book

- Machine Learning with R Edition 2, Brett Lantz.
- Pradhan, M., & Kumar, U. D. (2025). Machine learning using Python (2nd ed.). Wiley India.
- Mueller, J. P., & Massaron, L. (2016). Machine learning: In Python and R for dummies. John Wiley & Sons.

Course Code- DADS308	**VISUALIZATION**

Course Introduction: This course on *Visualization* focuses on transforming complex data into clear, insightful visual representations. Students will explore principles of visual design, data storytelling, and tools such as Matplotlib, Seaborn, and Tableau. Topics include creating charts, graphs, and interactive dashboards. Through practical projects, learners will develop the skills to communicate data-driven insights effectively, enhancing their ability to convey complex information in a meaningful and visually compelling way.

Learning objectives:

- Create some stunning visualizations using R-Shiny
- Design R-Shiny Dashboard
- Visualize Data using Tableau
- Tell Stories about the data using Tableau

Unit No.	**Details**
Unit I	**Introduction to Data Visualization:** What is Data Visualization, Importance of Data Visualization in Business Analytics.
Unit II	**Basic Visualization using R:** Plotting Using R, Creating Advanced Plots Using R, Introduction to Visual Analytics, Visual Analytics Using R.
Unit III	**Introduction to R-Shiny:** What is R-Shiny, Creating Basic R-Shiny Applications.

Unit IV	**Dashboard Design using R-Shiny:** Creation of R-Shiny Dashboards, Adding Features in R-Shiny Dashboards.
Unit V	**Advanced Dashboard and Visualization using R-Shiny:** Creation of Advanced Interactive R-Shiny Dashboards, Addition of Advanced Visualizations in R-Shiny Dashboards.
Unit VI	**Introduction to Tableau:** Working with Tableau, Understanding Different Features in Tableau.
Unit VII	**Data Management and Formatting using Tableau:** Editing, Building Views and Formatting, Data Management Using Tableau, Importing Data into Tableau, Importing Excel Data and Other Data Formats.
Unit VIII	**Mapping, Sorting and Filters in Tableau:** Mapping Techniques, Sorting Data, Applying Filters in Tableau.
Unit IX	**Advanced Features in Tableau:** Groups, Calculated Fields and Parameters, Sets, Trends, Reference Lines and Forecasting, Creating Calculated Fields, Table Calculations.
Unit X	**Level of Detail (LOD) Expressions in Tableau:** Aggregating Dimensionality Other than View Level Using LOD, Include LOD Expressions, Exclude LOD Expressions, Nested LOD Expressions.
Unit XI	**Dashboard and Storytelling in Tableau:** Introduction to Dashboards and Stories, Building Dashboards, Formatting Dashboards, Adding Interactivity to Dashboards, Building Stories.
Unit XII	**Introduction to Power BI:** Introduction to Power BI, Connecting to Data Using Power Query, Joining and Editing Data.
Unit XIII	**Data Handling and Visualization using Power BI:** Merging and Appending Data Sources, Creating Matrix Tables and Drill Downs, Creating Charts and Data Manipulation.
Unit XIV	**Visualization with Power BI Desktop:** Cleansing and Preparing Data, Creating Power View, Using Geo Maps for Visualization.

Reference Book

- Hoelscher, J., & Mortimer, A. (2018). Using Tableau to visualize data and drive decision-making. *Journal of Accounting Education*, *44*, 49-59. Batt, S., Grealis, T., Harmon, O., & Tomolonis, P. (2020).

Learning Tableau: A data visualization tool. *The Journal of Economic Education*, *51*(3-4), 317-328.

Information Technology

Course Code- DITF 305	**DATABASE MANAGEMENT SYSTEMS**

Course Introduction: This course on *Database Management Systems* provides a thorough understanding of database concepts, design, and applications. Students will explore topics such as relational models, SQL, normalization, and transaction management. The course also covers database architectures, security, and emerging trends like NoSQL databases. Through hands-on projects, learners will gain practical experience in designing and managing databases, preparing them to handle real-world data storage and retrieval challenges effectively.

Course Objectives:

- Describe the fundamental elements of relational database management systems
- Explain the basic concepts of relational data model, entity-relationship model, relational database design, relational algebra and SQL.
- Design ER-models to represent simple database application scenarios
- Convert the ER-model to relational tables, populate relational database and formulate SQL queries on data.

Unit No.	Detailed Syllabus
Unit 1	**Introduction to Database Management Systems:** Introduction, Concept of Database Management Systems, Advantages of DBMS over Traditional File Systems
Unit 2	**Database Management System:** Core Concepts of Data Models, Schemas, Instances, Data Independence, DBMS Components, Classification of Database Management Systems
Unit 3	**Database Management System -** Data Storage and File Structure: Secondary Storage Devices, Record Storage Techniques, Record Retrieval Methods
Unit 4	**Different Types of Indexes:** Types of Indexes, Importance of Indexing in Record Retrieval
Unit 5	**Entity-Relationship:** Concepts of Entity-Relationship Model, Entities, Attributes, Relationships, ER Diagrams
Unit 6	**Relational Algebra:** Concepts of Relational Algebra, Operations in Relational Algebra, Application in DBMS
Unit 7	**Relational Calculus:** Concepts of Relational Calculus, Tuple Relational Calculus, Domain Relational Calculus, Applications in DBMS
Unit 8	**Structured Query Language (SQL):** Evolution of SQL, Importance of SQL, SQL Commands, Data Definition Language, Data Manipulation Language
Unit 9	**Normalization**: Functional Dependencies, Normalization Concepts, Normal Forms, Removal of Data Redundancy
Unit 10	**Transaction Processing for DBMS:** Concepts of Transactions, Transaction Processing, ACID Properties, Transaction Management
Unit 11	**Concurrency Control:** Concept of Concurrency Control, Importance, Concurrency Control Techniques, Locking Mechanisms

Unit 12	**Database Recovery Management:** Concepts of Data Recovery, Recovery Techniques, Log-Based Recovery, Checkpoints
Unit 13	**Distributed Databases:** Concepts of Distributed DBMS, Client-Server Model, Advantages and Challenges
Unit 14	**Object-Oriented DBMS:** Concepts of Object-Oriented Databases, Comparison with Relational Databases
Unit 15	**Database Security & Integrity:** Introduction, Data Security, Data Integrity, Useful database security techniques, Integrity models, Database Authorization, Privileges.

Reference Books:

- Silberschatz, A., Korth, H. F., & Sudarshan, S. (2020). *Database system concepts* (7th ed.). McGraw-Hill Education
- Elmasri, R., & Navathe, S. B. (2021). *Fundamentals of database systems* (7th ed.). Pearson
- Coronel, C., & Morris, S. (2019). *Database systems: Design, implementation, & management* (13th ed.). Cengage Learning

COURSE CODE- DITF 306	**SOFTWARE ENGINEERING**

Course Introduction: This course on *Software Engineering* introduces the principles and methodologies of developing high-quality software systems. Students will learn about the software development lifecycle (SDLC), requirement analysis, design, coding, testing, and maintenance. Topics such as agile methodologies, version control, and software project management are covered. Emphasis is placed on best practices and tools to ensure software reliability and scalability. By the end of the course, learners will be equipped to manage software projects and deliver robust solutions.

Course Objectives:

- Understand and apply fundamental concepts, processes, and models of software engineering in real-world scenarios.
- Analyse, plan, and manage software projects using appropriate estimation, scheduling, and risk management techniques.
- Design and develop software systems using structured and object-oriented approaches.
- Evaluate software quality through testing, verification, validation, and reliability measures.
- Apply software engineering standards, configuration management, and quality assurance practices to ensure effective software delivery.

Unit No.	Detailed Syllabus
Unit 1	**The Process and Product Overview of Software and Software Engineering:** Overview of Software and Software Engineering, Software Process and Product, Process Framework, Process Patterns, Software Process Models
Unit 2	**Software Project Management (SPM):** Project Management Concepts, Project Management Process Phases, Size-Oriented Metrics, Function-Oriented Metrics, Software Quality Metrics, Integration of Metrics with Software Engineering Process
Unit 3	**Software Project Planning (SPP):** Software Project Planning, Scheduling, Tracking, Project Estimation Techniques and Models, Software Risk Management, Phases of Risk Management
Unit 4	**Software Reliability:** Concept of Software Reliability, Software Reliability Metrics, Programming for Reliability, Fault Avoidance, Fault Tolerance
Unit 5	**Software Configuration Management:** Concept of Software Configuration Management, Software Configuration Items, SCM Process, Version Control, Change Control, Configuration Audit, Configuration Status Reporting, SCM Standards
Unit 6	**System Engineering:** Concept of Computer Systems Engineering, Hardware Engineering, Software Engineering, Human Engineering, System Architecture, System Specifications, System Specification Review
Unit 7	**Analysis Concepts and Principles:** Requirement Analysis Tasks, Communication Problems and Techniques, Analysis Principles, Understanding Information Domain, Problem Partitioning, Information Processing, Software Prototyping, Prototyping Methods and Tools, Software Requirement Specification
Unit 8	**Design Concepts and Principles:** Design Fundamentals, Design Process, Modular Design, Data Design, Architectural Design, Procedural Design, Design Documentation
Unit 9	**Software Testing Techniques:** Fundamentals of Software Testing, White Box Testing, Control Structure Testing, Black Box Testing, Automated Testing Tools
Unit 10	**Software Testing Strategies:** Unit Testing, Integration Testing, Validation Testing, System Testing, Debugging Process, Debugging Approaches
Unit 11	**Software Verification:** Code Reading, Static Analysis, Symbolic Execution, Proving Correctness, Code Inspection
Unit 12	**Capability Maturity Model (CMM):** Concept of CMM, Five Maturity Levels, Key Process Areas, Common Features
Unit 13	**CMMI-Based Process Improvement:** Process Improvement using CMM, Management Sponsorship, Commitment, Management by Fact, Process Implementation, Training, Customer-Supplier Relationship
Unit 14	**Software Quality Assurance:** Software Quality Assurance Concepts, Quality Movement, Software Reviews, Formal Technical Reviews, Software Reliability Issues, SQA Activities, SQA Plan
Unit 15	**Object-Oriented Concepts and Principles:** Overview of Object-Oriented Concepts, Object Identification and Definition, Inter-Object Communication, Object-Oriented Analysis, Modelling, Prototyping

Reference Books:

- Pressman, R. S., & Maxim, B. R. (2023). *Software engineering: A practitioner's approach* (9th ed.). McGraw-Hill Education
- Ghezzi, C., Jazayeri, M., & Mandrioli, D. (2002). *Fundamentals of software engineering* (2nd ed.). Prentice Hall of India
- Jalote, P. (2017). An integrated approach to software engineering (3rd ed.). Springer

- Leon, A., & Leon, M. (2014). *Software engineering*. Vikas Publishing House
- Sommerville, I. (2020). *Software engineering* (10th ed.). Pearson
- Fenton, N. E., & Pfleeger, S. L. (2014). *Software metrics: A rigorous and practical approach* (3rd ed.). CRC Press

COURSE CODE- DITF 307	**TECHNOLOGY MANAGEMENT**

Course Introduction: This course on *Technology Management* focuses on leveraging technology for strategic advantage in organizations. Students will explore topics such as innovation management, technology life cycles, IT governance, and the impact of emerging technologies on business operations. The course emphasizes aligning technology initiatives with organizational goals and managing technological change. Through case studies and real-world applications, learners will develop the skills to lead technology-driven transformation and make informed managerial decisions.

Course Objectives:

- To assess the range, scope, and complexity of the phenomena, issues, and problems related to technology management
- To discuss various problems where particular managerial decisions need to be taken such as technology acquisition and transfer
- To use a range of tools used in technology creation, search, assessment, selection, implementation, utilization, and strategy
- To describe the primary tasks and decisions that are required to turn a technological innovation into a sound business opportunity

Unit No.	Detailed Syllabus
Unit 1	**Introduction to Technology Management:** Overview of Technology Management, Role and Significance, Process Technology, Product Technology
Unit 2	**Technology Acquisition:** Meaning of Technology Acquisition, Options for Technology Acquisition, Reasons for Acquiring New Technology, Management of New Technology
Unit 3	**Technology Forecasting:** Concept of Technology Forecasting, Need and Role, Forecasting Methods and Techniques, Relationship between Forecasting and Planning
Unit 4	**Technology Strategy and Competitiveness:** Technology Strategy, Innovation Management, Components of Competitive Advantage, Value Chain Analysis, Evaluation of Technology Management in Organizations

Unit 5	**Technology Adoption, Diffusion, and Absorption:** Concepts of Technology Adoption, Diffusion, and Absorption, Significance, Technology Package Components, Technological Dependence, Constraints in Technology Absorption, Management Issues, Benefits of Technology Absorption, Innovation Diffusion Process, Successful Diffusion Strategies
Unit 6	**Selection and Implementation of New Technologies:** Selection of New Technologies, Implementation Strategies, Automation Decisions
Unit 7	**Aspects and issues in Technology Management:** Aspects and Issues in Technology Management, Need for Technological Change, Technology Life Cycle, Technology Policies and Instruments, Nature and Classification of Technological Change
Unit 8	**Technology Generation and Development:** Process of Technology Generation, Determinants of Technology Development, Importance of Research and Development (R&D)
Unit 9	**Technology Transfer:** Models of Technology Transfer, Modes and Routes of Transfer, Dimensions of Technology Transfer, Features of Technology Package
Unit 10	**Technology Assessment:** Concept of Technology Assessment, Technology Choice, Assessment Process, Technology Leadership and Followership
Unit 11	**Managing Technology-**Based Innovation**:** Relationship between Technology and Innovation, Process of Technology-Based Innovation, Measures of Innovative Performance, Innovative Work Environment, Key Management Focus Areas
Unit 12	**Product Technology:** Concept of Product Development, Role of Government in Technology Development, Relationship between Technology, Development and Competition, Management of R&D, Intellectual Property Management
Unit 13	**Knowledge-Based Technology and Knowledge Management:** Overview of Knowledge-Based Technologies, Role of Artificial Intelligence Techniques, Knowledge Management Techniques in Technology Management
Unit 14	**Human Aspects in Technology Management:** Integration of People and Technology, Organizational Factors, Psychological Factors, Relationship between Organizational Structure and Technology Management
Unit 15	**Social Issues in Technology Management:** Social Issues in Technology Management, Technological Change and Industrial Relations, Technology Assessment, Environmental Impact Analysis

Reference Books:

- Yalcin, H., & Daim, T. U. (2024). *Future-oriented technology assessment: A manager's guide with case applications*. Wiley-IEEE Press
- Agarwal, P., Bajpai, L., Singh, C. P., & Gupta, K. (Eds.). (2025). *Engineering and technology management in challenging times*. Springer
- Kowalkiewicz, M. (2024). *The economy of algorithms: Rise of the digital minions*. Routledge
- Turban, E., Pollard, C., & Wood, G. (2024). *Information technology for management: Driving digital transformation to improve performance* (12th ed.). Wiley
- Narayanan, A., Kapoor, S., & Vallor, S. (2023). *AI snake oil: What artificial intelligence can do, what it can't, and how to tell the difference*. Princeton University Press

COURSE CODE- DITF 308	**BUSINESS INTELLIGENCE AND TOOLS**

Course Introduction: This course on *Business Intelligence (BI) and Tools* provides an overview of data-driven decision-making processes and BI technologies. Students will learn to collect, analyze, and visualize business data using tools such as Power BI, Tableau, and Excel. Key topics include data warehousing, dashboards, and reporting. Emphasis is placed on transforming raw data into actionable insights. Practical projects will help learners develop the technical and analytical skills to drive business strategy through informed decision-making.

Course Objectives:

- Understand the essentials of data analytics and the corresponding terminologies
- Be familiar with the steps involved in the analytics process and explain the process of data analytics, including the six steps of the Cross-Industry Standardized Process for Data Mining
- Be able to interact competently on the topic of data analytics and know the fundamental principles of data science and business analytics that form the basis for data mining processes, algorithms, and systems.
- Have had some hands-on experience in using data analytics techniques

Unit No.	Detailed Syllabus
Unit 1	**Introduction to Business Intelligence:** Definition of Business Intelligence, Evaluation of Business Intelligence, Value of Business Intelligence, Applications of Business Intelligence
Unit 2	**Business Essentials:** Business Essentials, Data to Information Conversion, Business Intelligence Environment and Platform, Role of Business Intelligence, Business Landscape

Unit 3	**Business Intelligence Types:** Types of Business Intelligence Tools, Reporting Tools, Analytical Tools, Data Visualisation Tools, Applications in Organisations
Unit 4	**Enterprise Data Architecture:** Data Models, Data Granularity, Data Reporting and Querying Techniques, Information Flow Design, Data Partitioning, Total Data Quality Management
Unit 5	**Introduction to Data Mining:** Concepts of Data Mining, Working of Data Mining, Advantages and Disadvantages, Ethical and Global Issues in Data Mining
Unit 6	**Data Mining Techniques:** Statistical Methods in Data Mining, Pattern Identification Techniques, Information Processing Models, Applications of Data Mining
Unit 7	**Introduction to Data Warehousing:** Concepts of Data Warehousing, Characteristics of Data Warehouses, OLTP vs OLAP, Multidimensional Data Models, OLAP Tools, Practical Applications of OLAP
Unit 8	**Different Ways of Data Warehousing:** Types of Data Warehousing Models, Business Models in Data Warehousing, Implementation Approaches
Unit 9	**Knowledge Management:** Concept of Knowledge Management, Need and Significance, Knowledge Creation, Storage and Utilisation, Technologies for Knowledge Management
Unit 10	**Data Extraction:** Data Extraction Process, Techniques of Data Extraction, Identification of Data Sources, Data Integration
Unit 11	**BI Life Cycle :** Business Intelligence Life Cycle, Enterprise Performance Life Cycle Framework, Human Factors in BI Implementation, BI Strategies, Roadmap Development, Project Planning, Centralised vs Decentralised BI Architecture, Stages of BI Development
Unit 12	**User Model history of Business Intelligence:** History of Business Intelligence, Opportunity Analysis in BI, Dashboards, OLAP Applications, Types of BI Users, Content Management Systems
Unit 13	**Business Intelligence Issues and Challenges:** Implementation Challenges, BI Application Development Issues, Impact of Inaccurate Information, Understanding Customer Requirements
Unit 14	**Business Intelligence Strategy and Roadmap:** BI Strategy Development, Roadmap Planning, Factors Affecting BI Strategy
Unit 15	**Implementing Business Intelligence:** BI Platform Selection, BI Products, BI Vendors, Implementation Considerations

Reference Books:

- Sharda, R., Delen, D., & Turban, E. (2024). Business intelligence, analytics, data science, and AI: A managerial perspective (5th ed.). Pearson
- Charles, V., Garg, L., Gupta, A., & Agarwal, A. (2022). Data analytics and business intelligence: Computational frameworks, practices, and applications. CRC Press
- Cheong, M. L. F. (2024). Data and decision analytics for business operations. Springer
- Zwingmann, T. (2022). AI-powered business intelligence: Improving forecasts and decision making with machine learning. Wiley
- Hassanien, A. E. (Ed.). (2022). Business intelligence and information technology. Springer

Operation Management

COURSE CODE-DOMS305	ADVANCED PRODUCTION AND OPERATIONS MANAGEMENT

Course Description:

Advanced Production and Operations Management is an advanced-level course that focuses on the strategic and analytical aspects of production and operations systems in organizations. The course helps students understand modern techniques used for planning, controlling, and improving manufacturing and service operations. It covers topics such as inventory management, quality management, supply chain coordination, forecasting, lean systems, and productivity improvement. The subject emphasizes decision-making, efficiency, and optimization in business operations. It also develops students' ability to solve real-world operational problems using modern tools and techniques.

Course Objectives:

On completion of this course, learners will be able to

- Explain the importance of forecasting and demonstrate the ability to apply some mathematical forecasting techniques.
- Demonstrate an understanding of the concept of aggregate planning.
- Demonstrate an understanding of the problems involved in inventory management.
- Demonstrate an understanding of the principles underlying materials requirements planning and operations scheduling.

Units	Detailed Syllabus
Unit 1	**Overview of Operations Management**: Definition of Operations Management, functions and activities of Operations Managers, and emerging business trends in Operations Management.
Unit 2	**Frameworks for Operations Management**: Porter's Value Chain, the relationship between operations and marketing, Product Life Cycle, and the six Ps of Operation Mix.

Unit 3	**Competitiveness and Strategy**: Definition and importance of productivity, effective strategies for competitive organizations.
Unit 4	**Profitability of Business Operations**: Definition and importance of profitability, types of costs, concepts of cash flows, and basic concepts of financial decision making.
Unit 5	**Break-Even Analysis:** Definition of Operations Cost, factors influencing operations cost, concept of Break-Even Point.
Unit 6	**Facilities Location**: Role of globalization in location planning, importance of location decisions, various options available for location decisions.
Unit 7	**Forecasting**: Elements of a good forecast, steps involved in forecasting, qualitative techniques of forecasting, merits and demerits of forecasting techniques.
Unit 8	**Workforce Planning and Productivity**: Systems of productivity and performance measurement, key elements of workforce performance, the process of managing workforce, and Effective Improvement in various functions of management.
Unit 9	**Capacity Planning and Material Handling**: Principles of designing integrated material handling systems, the importance of good layout for efficient material handling.
Unit 10	**Lean Operations and Time-Based Competitiveness**: Definition of Lean Operations, development of time-based competitiveness, design for manufacture, and simultaneous engineering.
Unit 11	**Quality Systems in Operations**: Concept of Quality, methods to achieve quality in operations.
Unit 12	**Independent Demand:** Types and uses of inventory, inventory management techniques, cycle counting, and inventory record accuracy.
Unit 13	**Statistical Quality Control**: Definition of Statistical Quality Control, methods of descriptive statistics, concept of probability distribution.
Unit 14	**Failure Prevention and Recovery**: Methods of measuring failure, approaches to maintenance, and the importance of failure recovery.
Unit 15	**Implementation Agenda**: Implementation agenda, converting strategies into practice, decisions resulting from operational strategies, and the ethical dimensions of operations.

Reference Books

- Russell, R. S., & Taylor, B. W. (2023). Operations and supply chain management. Wiley.
- Reid, R. D., & Sanders, N. R. (2023). Operations management: An integrated approach. Wiley.
- Ivanov, D., Tsipoulanidis, A., & Schönberger, J. (2025). Global supply chain and operations management: A decision-oriented introduction to the creation of value. Springer.
- Sachdeva, A., Kumar, P., Yadav, O. P., & Tyagi, M. (2022). Recent advances in operations management applications. Springer.

- Srinivas, S., Rajendran, S., & Ziegler, H. (2021). Supply chain management in manufacturing and service systems: Advanced analytics for smarter decisions. Springer.
- Miśkiewicz, R. (2026). The digital transformation of production and operations management: Energy systems, manufacturing, and sustainability. Routledg

COURSE CODE-DOMS306	INTRODUCTION TO PROJECT MANAGEMENT

Course Introduction: Project Management is an application of knowledge, skills, and techniques to accomplish projects effectively. Project management enables organisations to align project goals with their business goals to achieve a better place in the market. According to William Dauphinais, a partner at Price Waterhouse, "Project management is going to be huge in the next decade. The project manager is the linchpin in the horizontal/vertical organisations we're creating."

Course Objectives:

On completion of this course, learners will be able to:

- Identify and explain project characteristics, scope, resources, project life cycle, project charter, and cost management concepts.
- Describe and apply PMBOK principles, Triple Constraints, and project integration techniques in project management.
- Develop project plans using Work Breakdown Structure (WBS), task duration estimation, and activity scheduling tools.
- Analyse project financial feasibility through cost estimation, cash flow analysis, and capital budgeting techniques.
- Evaluate project performance using monitoring systems, earned value analysis, project control measures, and project closure processes.

Units	Syllabus
Unit 1	**Meaning of a Projects**: Concept of a Project, elements, Importances, Characteristics of a Project, Project Life Cycle and Project Process, Project Resources, Scope of a Project, Project Charter, Project Cost.
Unit 2	**Understanding Project**: Meaning of Project Management, Objectives of Project Management, Advantages of Project Management, Principles of Project Management, Knowledge Areas of Project Management, Project Management Framework, Triple Constraints, Management by Objectives (MBO), Project Management Body of Knowledge (PMBOK), Project Integration Management.
Unit 3	**Project Management Life Cycle**: Project Initiation, Project Planning, Project Design, Project Testing, Project Development, Project Closure, Rita’s Process Chart.

Unit 4	**Project Planning**: Concept of Project Planning, Steps of Project Planning, Types of Project Plans, Financial Plan, Quality Plan, Contingency Plan, Communication Plan, Procurement Plan, Requirements of Project Planning, Project Organisation, Project Structure, Project Key Personnel, Key Resources, Work Breakdown Structure (WBS), Task Duration and Activity Scheduling.
Unit 5	**Market Analysis and Demand Forecasting**: Concept of Market Analysis, Collection of Market Information, Factors Affecting Market Information, Demand Forecasting, Qualitative and Quantitative Approaches of Demand Forecasting, Process of Demand Forecasting, Product Line Analysis, Product Mix Analysis, New Product Development, Selection of Plant Location, Plant Capacity, Environmental Aspect of a Project, Estimation of Production and Sales.
Unit 6	**Financial Feasibility:** Estimation of Cost, Cost of Production, Cash Flows, Debt and Repayment Considerations
Unit 7	**Project Selection**: Meaning and Need of Project Selection, Capital Budgeting Techniques in Project Selection, ARR Method, PBP Method, NPV Method, IRR Method, PI Method, Capital Rationing.
Unit 8	**Multiple Projects and Constraints**: Constraints in Multiple Project Environment, Project Dependence, Capital Rationing, Project Indivisibility, Methods of Ranking Projects.
Unit 9	**Social Cost Benefit Analysis**: Concept and Applications of SCBA, Challenges in SCBA, Rationale of SCBA, UNIDO Approach, Little-Merrlees Approach, SCBA Approach used by Indian Financial Institutions.
Unit 10	**Infrastructure Project**: Financing Infrastructure Projects in India, Sources of Financing Infrastructure Projects, Recent Developments in Infrastructure Financing, Project Configuration, Project Parties, Project Contracts, Corporate Governance Practices in Infrastructure Projects, Financing of Power Projects, Financing of Telecommunication Projects.
Unit 11	**Project Procurement Management**: Concept of Procurement Management, Procurement Planning, Solicitation Planning, Solicitation, Source Selection, Contract Administration, Contract Closeout.
Unit 12	**Project Evaluation and Auditing**: Concept and Purpose of Project Evaluation, Advantages of Project Evaluation, Concept of Project Audit, Audit Team, Project Audit Life Cycle, Audit Report, Auditing in the Indian Scenario, Differences between Project Evaluation and Project Audit.
Unit 13	**Project Monitoring**: Planning-Monitoring-Controlling Cycle, Project Monitoring, Designing of Monitoring System, Information Collection and Analysis, Reporting and its Types, Earned Value Analysis.
Unit 14	**Project Controlling**: Project Controlling, Types of Control, Control System Designing, Types of Control Systems, Tools for Control, Management Control System, Identifying Key Performance Areas, Identifying Strategic Control Points.
Unit 15	**Project Termination**: Meaning of Project Termination, Factors Considered for Terminating a Project, Project Termination Process, Project Final Report.

References:

- Schwalbe, K. (2021). Information technology project management. Cengage Learning.

- Larson, E. W., & Gray, C. F. (2024). Project management: The managerial process. McGraw-Hill Education.
- Kerzner, H. (2022). Project management: A systems approach to planning, scheduling, and controlling. Wiley.
- Chandra, P. (2023). Projects: Planning, analysis, financing, implementation, and review. McGraw-Hill Education.
- Singh, N. (2021). Project management and control. Khanna Publishing House.

COURSE CODE-DOMS307	**LOGISTICS AND SUPPLY CHAIN MANAGEMENT**

Course Description:

This course on *Logistics and Supply Chain Management (SCM)* provides a comprehensive understanding of the processes involved in managing the flow of goods, services, and information across global supply chains. Students will explore key concepts such as procurement, transportation, inventory management, warehousing, and distribution. The course covers the integration of logistics functions within the broader supply chain, emphasizing the importance of cost efficiency, customer satisfaction, and strategic alignment. Topics like demand forecasting, risk management, and sustainable practices in supply chain operations are also discussed. Through case studies and real-world examples, learners will gain the skills to optimize supply chains and manage logistics operations effectively in a dynamic business environment.

Course Objectives:

On completion of this course, learners will be able:

- To describe the increasing significance of logistics and its impact on both costs and service in business and commerce.
- To incorporate and learn the critical elements of logistics and supply-chain management processes based on the most relevant application in forward-thinking companies.
- To develop criteria and standards to achieve improved business performance by integrating and optimizing the total logistics and supply-chain process.
- To describe the ways to shift the business culture from functional work to overall process-driven results.

Units	Detailed Syllabus
Unit 1	**Overview of supply chain management:** Features of supply chain management, Objectives and significance of the supply chain management, Functions of supply chain management, Key Players in supply chain management, Evolution of supply chain management, Challenges of supply chain management, Information Technology in the Supply Chain management.

Unit 2	**Logistics of Distribution**: Introduction, Concept of Logistics, Significance of Logistics, Characteristics of Logistics, Functions of Logistics, Key Players in Logistics, Logistics Management Cycle, Technological Effect on Logistics Information System, Domestic and International Challenges before Logistics.
Unit 3	**Planning and Designing the Supply Chain**: Introduction, Supply Chain Planning, Supply Chain Design and Planning. Supply Chain Integration: Information Sharing in Supply Chain Integration, Integrating Supply Chains, Supplier Integration. Analysis of supplier selection and development: Supplier Selection, Factors Affecting Selection of Suppliers, Qualities of a Good Supplier, Supplier Selection Process. Access Forecasting in Supply Chain Planning and Design: Methods of Forecasting – Qualitative and Quantitative, Significance of Forecasting, Quantitative Approaches of Forecasting, Qualitative Approaches of Forecasting.
Unit 4	**Partnerships in Supply Chain Management**: Introduction, Partnerships in Supply Chain Management, Establishing Supplier Relationships, Benefits of Supply Chain Partnership: Types of Collaborations in Supply Chain Management. Overcoming Supply Chain Partnership Obstacles, Strategies to Overcome Obstacles, Mutual Relationship in Outsourced Supply Chain: Reasons for Outsourcing, Risks in Supply Chain Outsourcing.
Unit 5	**Collaborative Planning, Forecasting, and Replenishment**: Introduction, Collaborative Planning Forecasting and Replenishment (CPFR), Origin of CPFR, Essential Components of ECR, Implementation of CPFR Process, CPFR Phases in Supply Chain Collaboration: Advantages and Disadvantages of CPFR, Customer Service and Replenishment: Replenishment Strategy, Types of Replenishment, Benefits of Replenishment, Best Practices for Inventory Replenishment.
Unit 6	**Influence of Supply Chain Management**: Introduction, Influence of Supply Chain Management, Process of Creating Value for Customers through Supply Chain: Processes of Sourcing and Purchasing, Demand Planning, Transportation and Warehousing, Reverse Logistics and Track-and-Trace. Process of Creating Customer Satisfaction through Supply Chain: Supply Chain Factors Impacting Customer Satisfaction, Management of Supply Chain for Efficiency and Customer Satisfaction. Influence of Supply Chain on Customer Behaviour.
Unit 7	**Procurement Management**: Introduction, Procurement Management, Significance of Procurement, Principles of Procurement. Types of Procurement: Procurement Components, Sourcing, and Procurement. Procurement Process: Steps in the Procurement Process, Optimising the Procurement Procedure, Common Issues in the Procurement Process. Contract Process and Procurement Management: Importance of Contract Management in Procurement, Process for Managing Contracts, Successful Strategies for Managing Contracts.
Unit 8	**Assessment of Supply Chain Management**: Introduction, Assessment of Supply Chain Management, Significance of Assessment of SCM, Need for Assessment of Supply Chain Management, Different Ways for Conducting Assessments of SCM Process: Supply Chain Operations Reference Model (SCOR), Balanced Scorecard Model, Function-Based Measurement System Perspectives, Perspectives-Based Measurement System, Interface-Based Measurement System.
Unit 9	**Mapping for Supply Chain Management**: Introduction, Mapping for Supply Chain Management, Benefits of Mapping Supply Chain, Approaches for Supply Chain Mapping to Avoid Mistakes. Process of Supply Chain Management Mapping, Relation-Based Mapping in Supply Chain Management, Supply Chain Relation with Respect to Telecom, Time-Based Process Mapping in Supply Chain, Pipeline Inventory Process Mapping, Extended Value Stream Maps.

Unit 10	**Development of Supply Chain Management Systems**: Introduction, Supply Chain Management Systems, Concept and Nature of Supply Chain Management, Scope of Supply Chain Management, Concepts of Supply Chain Management Systems, Benefits of Supply Chain Systems.
Unit 11	**Information Systems in Supply Chains**: Introduction, Information Systems in Supply Chains, Role of Information Systems in the Supply Chain, Role and Impact of E-Business in Supply Chain Processes.
Unit 12	**Role of Marketing in SCM**: Introduction, Marketing in Supply Chain Management, Role of Marketing in Supply Chain Management, Concepts of Marketing, Integrated Framework for the Role of Marketing in Supply Chain Management.
Unit 13	**Reverse Supply Chain**: Introduction, Reverse Supply Chain Management, Need for Reverse SCM, Importance of Reverse Supply Chain, Process of Reverse SCM, Impact of Reverse SCM on Profitability.
Unit 14	**Supply Chain Management**: **The Next Steps:** Introduction, SCM Framework, GSCF for Supply Chain Management, SCOR for Supply Chain Management, Strengths and Weaknesses of GSCF and SCOR, Importance of Value Creation in Supply Chain Management Frameworks.
Unit 15	**IT for Supply Chain Management**: Introduction, Concept of Information Technology in Supply Chain Management, Significance of Information in Supply Chain Management, Origin of IT in Supply Chain Management, Emerging Technologies used in Supply Chain, Impact of Technology in Supply Chain Management.

Reference Book

- Christopher, M. (2023/2026). Logistics and supply chain management. Pearson.
- Mangan, J., Lalwani, C., & Calatayud, A. (2025). Global logistics and supply chain management. Wiley.
- Ivanov, D., Tsipoulanidis, A., & Schönberger, J. (2025). Global supply chain and operations management. Springer.
- Chopra, S., & Meindl, P. (2021). Supply chain management: Strategy, planning, and operation (7th ed.). Pearson.
- Sople, V. V. (2021). Logistics management: The supply chain imperative. Pearson.
- Gopalakrishnan, P., & Sundaresan, M. (2020). Materials management: An integrated approach. PHI Learning Private Limited

COURSE CODE-DOMS308	**APPLICATIONS OF OPERATIONS RESEARCH**

Course Description:

This course on *Operational Research* introduces students to the mathematical and analytical techniques used to solve complex decision-making problems in organizations. It covers key topics such as linear programming, optimization, queuing theory, inventory management, and simulation. The course emphasizes the application of quantitative methods to improve efficiency, resource allocation, and overall operational performance in business and industry.

Through case studies and practical examples, students will develop the skills to model real-world problems, analyse data, and apply optimization techniques to make informed decisions. This course prepares learners to address challenges in operations and enhance decision-making capabilities in various sectors.

Course Objectives:

On completion of this course, learners will be able to

- Analyse any real-life system with limited constraints and depict it in a model form.
- Solve the mathematical model manually as well as using soft resources/software such as Excel Solver, CPLEX, etc.
- Understand a variety of problems, such as assignment, transportation, traveling, salesman, etc. Enterprise Resource Planning

Units	Syllabus
Unit 1	**Applications of Operations Research:** Objectives, Definition of Operations Research, Characteristics of Operations Research Approach, Operations Research Methodology, Uses and Limitations of Operations Research, Application of Operations Research in Decision Making.
Unit 2	**Defining and Mathematical Formulation of a Problem**: Introduction, Definition, Operations Research, Mathematical Programming and Discrete Optimization, Operations Research in Practice, Identifying Constraints, Mathematical Formulation, Examples of Mathematical Formulation, Identifying Decision Variables.
Unit 3	**Solving a Problem Using a Graphical Method**: Introduction, Drawing Graph of a Straight Line, Linear Programming Example – Production of Wooden Tables and Chairs, Corner Point Solution, Infeasible Solution.
Unit 4	**Introduction to Linear Programming**: Introduction, Definition of Linear Programming, Linear Programming Model, Assumptions of Linear Programming, Examples of Linear Programming.
Unit 5	**The Simplex Method**: Introduction, Essence of the Simplex Method, Simplex Algorithm, Simplex Method in Tabular Form.
Unit 6	**The Theory of the Simplex Method**: Introduction, Foundation of the Simplex Method, Simplex Method in Matrix Form, Revised Simplex Method.
Unit 7	**Duality Theory**: Introduction, Essence of Duality Theory, Economic Interpretation of Duality, Primal-Dual Relationship.
Unit 8	**Sensitivity Analysis**: Introduction, Role of Duality Theory in Sensitivity Analysis, Essence of Sensitivity Analysis, Applying Sensitivity Analysis, Performing Sensitivity Analysis on a Spreadsheet.
Unit 9	**Solving Linear Programming Using Excel**: Introduction, Solving Linear Programming Using Excel Solver, Define and Enter Data for the Model in Excel, Defining the Objective and Constraints in Excel, Running Excel Solver to Get Output of Linear Program, Analysing the Output.
Unit 10	**Transportation Problem**: Introduction, Definition, A Streamlined Simplex Method for the Transportation Problem.

Unit 11	**Assignment Problem**: Introduction, Definition of the Assignment Problem, A Special Algorithm for the Assignment Problem.
Unit 12	**Dynamic Programming**: Introduction, Dynamic Programming Prototype Example, Characteristics of Dynamic Programming.
Unit 13	**Integer Programming**: Introduction, Integer Programming Applications, Binary Variables Model Formulation, Branch and Bound Technique, Mixed-Integer Programming.
Unit 14	**Non-Linear Programming**: Non-Linear Programming Applications, Graphical Illustrations, One Variable Constrained Optimization, Multivariate Unconstrained Optimization, KKT Conditions, Quadratic Programming, Convex and Non-Convex Programming.
Unit 15	**Metaheuristic Relevance**: Metaheuristic Relevance and Its Needs, Tabu Search, Simulated Annealing, and Genetic Algorithms.

Reference Books

- Taha, H. A. (2017). Operations research: An introduction (10th ed.). Pearson.
- Hillier, F. S., & Lieberman, G. J. (2015). Introduction to Operations Research (10th ed.). McGraw-Hill Education.
- Winston, W. L. (2004). Operations research: Applications and algorithms (4th ed.). Thomson Brooks/Cole.
- Panneerselvam, R. (2012). Operations research (2nd ed.). PHI Learning Private Limited.
- Tiwari, N. K., & Shandilya, S. K. (2006). Operations research. New Age International Publishers.
- Mehta, D. M., & Jain, S. K. (2012). Operations research: Theory and applications. Himalaya Publishing House.

International Business

COURSE CODE-DIBM305	**INTERNATIONAL FINANCIAL MANAGEMENT**

Course Description:

This course on International Financial Management explores the complexities of managing finance in a global context. Students will examine key concepts such as foreign exchange markets, international capital budgeting, risk management, and cross-border investment strategies. The course delves into topics like exchange rate determination, hedging techniques, multinational capital structures, and the impact of international financial institutions. Through case studies and real-world scenarios, learners will develop the skills to navigate financial challenges in diverse economic environments. Designed for future finance professionals, this course equips participants with the knowledge and tools to make strategic decisions in the dynamic landscape of international finance.

Course Objectives

On completion of this course, learners will be able to

- Understand the functioning of foreign exchange and international financial markets.
- Evaluate the feasibility and implications of cross-border investment opportunities.
- Analyse risks arising from exchange rate fluctuations and formulate appropriate risk management strategies.
- Examine the various financing options and instruments available for international trade and foreign business operations.

Course Contents:

Unit No.	Details
Unit 1	**International Financial Management:** Globalization', goals of International Financial Management.
Unit 2	**Balance of Payments:** Concepts and principles of balance of payments and its various components. The Current Account Deficit and Surplus and Capital Account Convertibility.
Unit 3	**Foreign Exchange Market:** Origin of the concept of foreign exchange, the difference between fixed and floating rates. Foreign exchange transactions and the derivative instruments traded in foreign exchange market such as forwards, futures, swaps, and options.
Unit 4	**Currency Derivatives:** Meaning of Currency Derivatives, Types of currency derivatives, Over the Counter Contracts (OTC), Exchange Traded Contracts (Etc)Forward markets and the different concepts, currency futures markets and currency options markets and functions
Unit 5	**Exchange Rate Determination:** Exchange rate movements, factors that influence exchange rates, movements in cross exchange rates, concepts of international arbitrage, interest rate parity, purchasing power parity and the International Fisher effect.
Unit 6	**International Financial Markets:** Basic concepts of the international money market. International credit markets (loans in various forms) from the creditors/investors, Types of International Credit Market
Unit 7	**Foreign Trade Finance:** Concept of foreign trade finance. Concepts of financing exports and financing imports and documentary collections, factoring, forfeiting and countertrade.
Unit 8	**Nature and Measurement of Foreign Exchange Exposure:** Nature and measurement of foreign exchange exposure. Types of exposures and the various types of translation methods. .
Unit 9	**Management of Foreign Exchange Exposure:** Concept of exposure forward and foreign exchange exposure, various tools and techniques of foreign risk management.

Unit 10	**International Capital Structure:** International capital structure, cost of capital, the capital structure of MNCs, cost of capital in segmented versus integrated markets.
Unit 11	**International Capital Budgeting:** Introduction to international capital budgeting, adjusted present value model, capital budgeting from parent firm's perspective and expecting the future expected exchange rate analysis
Unit 12	**Country Risk Analysis:** Country-risk factors, assessment of risk factors. Techniques through which the country risks can be assessed as well as measured.
Unit 13	**International Taxation:** Iinternational tax system, principles of taxation, double taxation, tax havens and transfer pricing. International tax management strategy and Indian tax environment.
Unit 14	**Foreign Direct Investment, International Portfolio and Cross Border Acquisitions:** Flow, cost and benefits of Foreign Direct Investment, ADR and GDR, concept of portfolio, cases on cross border acquisitions

Textbook:

- International Financial Management, P. G. Apte & Sanjeevan Kapshe (8th ed.), McGraw Hill Education (2020)

Reference Book:

- Multinational Financial Management, Alan C. Shapiro, Paul Hanouna & Atulya Sarin (12th ed.), John Wiley & Sons (2024).
- International Financial Management, Jeff Madura (15th ed.), Cengage Learning (2023).
- International Corporate Finance, Madhu Vij, Excel Books Springer (2021)

COURSE CODE-DIBM306	**INTERNATIONAL MARKETING**

Course Description:
This course on *International Marketing* explores the strategies and practices involved in marketing products and services across international borders. Students will examine key concepts such as global market entry strategies, international consumer behavior, cultural differences, and the impact of economic, political, and legal factors on marketing decisions. The course covers topics including market research, product adaptation, pricing strategies, distribution channels, and international advertising.

Course Objectives

On completion of this course, learners will be able

- To explain the importance of international marketing
- To assess the factors in international marketing environment
- To discuss the components of international marketing mix

- To discuss the international exporting process
- To use global e-marketing for expanding business

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Course Contents:

Unit No.	Details
Unit 1	**Introduction to International Marketing:** Introduction, Scope of International Marketing, Principles of International Marketing, International Marketing vs. Domestic Marketing, Customer value and the value equation, Competitive or differential advantage, Management Orientations, Multinational Enterprises (MNEs).
Unit 2	**International Marketing Environment:** Introduction, Political Environment, Political systems, legal and Regulatory Environment, Socio-cultural Environment, Economic Environment, Technological Environment, Challenges in Global Marketing.
Unit 3	**International Trade Environment:** Introduction, classical trade theories, modern trade theories, trade barriers, quotas, Implications of Tariffs, Types of Agreements, General Agreement on Tariffs and Trade (GATT), Functions and Objectives of WTO, Implication of WTO on International Marketing, India's Role in International Trade Theories.
Unit 4	**International Market Entry Modes:** Introduction, Different Entry Modes and Market Entry Mode, joint Ventures, Strategic Alliances, Direct Investment, Manufacturing and Franchising, Basic Concepts of Research in Business.
Unit 5	**International Marketing Research:** Introduction, Concept of International Marketing Research, Need for Marketing Research, Approach to Marketing Research, Scope of International Marketing Research, International Marketing Research Process, market surveys, marketing information system
Unit 6	**International Product Policy and Planning:** Introduction, Products: National and International, the new Product Development, International Product Planning, Product Adoption and Standardization, International Market Segmentation, Influences on Marketing Plan and Budget, International Product Marketing
Unit 7	**International Pricing Policy :** Price and Non-Price Factors, Methods of Pricing, International Pricing Strategies, Dumping and Price Distortion, Counter Trade
Unit 8	**International Distribution and Logistics Planning:** Introduction, International Logistics Planning, Distribution – Definition and Importance, Direct and Indirect Channels, factors Involved in Distribution Systems, Modes of Transportation, and International Packaging.
Unit 9	**International Promotional Strategies:** Introduction, Communications Process, principles of communication, Status of Promotion, Promotion Appeals, Media Selection, Personal Selling, Public Relations and Publicity, Sales Promotion, advertising.
Unit 10	**Foreign Markets and Export Marketing Process:** Introduction, Export Marketing, choosing appropriate mode of operations, Issues Related to Exports, processing an Export Order, Entering export contract, Export Pricing and Costing, Export-Import (EXIM) Policy 2015-2020.

Unit 11	**Export Marketing Documentation:** Introduction, Significance of export documentation, the statutory control, declaration forms, disposal of export documentation form, major documents, Export/Import Procedure
Unit 12	**Foreign Trade Policy:** Introduction, export Promotion Capital Goods Scheme, Duty Exemption/Remission Schemes, Special Economic Zones (SEZS), Free Trade Warehousing Zones (FTWZ), Star Export Houses, Deemed exports, Agri Export Zones, Target Plus Scheme
Unit 13	**Foreign Exchange and Foreign Currency:** Introduction, the Foreign Exchange Market, Organisation of the foreign exchange market, Exchange Rate Policy and Management, Triangular Arbitrage, Future and Forward Market, foreign Currency Options, Forecasting Foreign Exchange Rates
Unit 14	**International Financial Institutions:** Financial Institutions in the World Introduction, IMF, World Bank – IBRD, International Finance Corporation, Organisation for Economic Cooperation and Development (OECD)
Unit 15	**Legal and Ethical Issues in International Marketing:** Introduction, Nature of International Business Disputes and Proposed Action, Legal Concepts Relating to International Business, International Dispute Settlement Machinery, ethical Consideration in International Marketing and Marketing Communications.

Reference Book:

- Global Marketing, Svend Hollensen (8th ed.), Pearson Education (2020).
- International Marketing, Michael R. Czinkota & Ilkka A. Ronkainen (11th ed.), Cengage Learning (2021).
- International Marketing, Philip R. Cateora, Mary C. Gilly & John L. Graham (18th ed.), McGraw Hill Education (2023).

COURSE CODE-DIBM307	**INTERNATIONAL HUMAN RESOURCE MANAGEMENT**

Course Description:

This course provides a comprehensive understanding of International Human Resource Management (IHRM) in the context of global business operations. It focuses on the management of human resources across national boundaries and examines the cultural, legal, economic, and organizational factors influencing global HR practices. The course covers key areas such as international staffing, expatriate management, cross-cultural training, global compensation, performance management, workforce diversity, and ethical issues in international HRM. It equips learners with the knowledge and skills required to manage and develop a diverse global workforce effectively in multinational organizations.

Course Objectives

On completion of this course, learners will be able to:

- Understand the concepts, scope, and global orientations of International Human Resource Management.
- Analyze the influence of cultural, economic, political, legal, and technological environments on international HR practices.
- Examine organizational structures and workforce diversity issues in multinational organizations.
- Evaluate international staffing, recruitment, expatriation, repatriation, and global assignment management practices.
- Develop strategies for international training, compensation, and performance management in cross-cultural environments.
- Identify legal, ethical, and contemporary challenges associated with managing human resources globally.

Course Contents:

Unit No.	**Details**
Unit 1	**Introduction to IHRM:** Concept and scope of IHRM, EPRG orientation, Models of IHRM: PCN, HCN, TCN, Differences between domestic and international HRM
Unit 2	**Environmental Influences on IHRM:** Impact of cultural, economic, and legal environments, Technological and political influences.
Unit 3	**International Organization Structures:** Concept and types of international structures, Factors influencing structure design.
Unit 4	**Workforce Diversity Management:** Managing cultural and demographic diversity, Benefits and challenges in global teams.
Unit 5	**Organizational Restructuring and Downsizing:** Causes and impacts of restructuring, Best practices in managing downsizing.
Unit 6	**Legal and Ethical Aspects of IHRM:** International labor laws and regulations, Ethical dilemmas in global HR practices.
Unit 7	**International Recruitment and Selection:** Selection criteria for global roles, Challenges and processes in international recruitment
Unit 8	**Expatriate Management:** Phases of expatriate adjustment, Challenges and solutions for expatriate failure.
Unit 9	**Repatriation and In-patriation:** Concepts and challenges of repatriation, Inpatriation processes and benefits
Unit 10	**International Training Programmes:** Objectives and types of international training, Cross-cultural, pre-departure, and language training
Unit 11	**Frameworks for Cross-Cultural Training:** Tung's framework, Mendenhall and Oddou's model, Black and Mendenhall's framework.
Unit 12	**Types of Global Assignments:** Short-term vs. long-term assignments, Managing international project teams.
Unit 13	**International Compensation Systems:** Components and approaches (balance sheet, going rate), Variables influencing compensation.

Unit 14	**International Performance Management:** Meaning and process of performance management, Expatriate performance evaluation, Cultural and contextual challenges, Steps to manage global performance issues

Reference Book:

- Managing a Global Workforce, Charles Vance, Yongsun Paik, Fabian Jintae Froese & Torben Andersen.
- International Human Resource Management, Dr. P. Subba Rao.
- International Management: Culture, Strategy, and Behavior, Jonathan P. Doh, Fred Luthans & Ajai S. Gaur, McGraw Hill (2023).
- International Human Resource Management, Peter J. Dowling, Marion Festing & Allen D. Engle Sr. (8th ed.), Cengage Learning (2023).

COURSE CODE-DIBM308	**EXPORT-IMPORT MANAGEMENT**

Course Description:
This course provides a comprehensive understanding of export-import management and the procedures involved in international trade operations. It focuses on export-import documentation, trade regulations, customs procedures, export finance, cargo and credit risk insurance, and international trade logistics. The course also examines government policies, export promotion schemes, electronic data interchange systems, and risk management practices associated with global trade. Through practical insights into export-import procedures and trade facilitation mechanisms, the course equips learners with the knowledge and skills required to manage international business transactions effectively.
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Course Objectives

On completion of this course, learners will be able to

- Understand the concepts and procedures of export-import management.
- Analyze export-import documentation, customs procedures, and trade regulations.
- Evaluate export finance, insurance, and risk management practices in international trade.
- Examine export promotion agencies, government schemes, and EXIM policies.
- Develop understanding of shipping, logistics, EDI systems, and export document negotiation.

Course Contents:

Unit No.	**Details**

Unit 1	**Introduction to International Business:**Overview of International Business, Scope of International Business, Motives for engaging in International Business, Challenges and Problems in International Business
Unit 2	**Steps for Export-Import Business:** Introduction to Export-Import Operations, Establishing an Export-Import Firm: Legal and Regulatory Framework, Market Analysis and Entry Strategies, Financial Planning and Resource Allocation for Export-Import Firms
Unit 3	**International Contract - Processing of an Export Order:** Processing of an Export Order: Introduction, Steps, Packaging Techniques for Export Consignments, Shipping and Freight Arrangements, Role and Selection of clearing and forwarding agents, Quality control and pre-shipment inspection: Best Practices.
Unit 4	**Processing of an Import Order:** Processing of an Import Order: Introduction, Remittance against import: Opening of Letter of credit, Import Policy and Documentation: Navigating Regulatory Requirement
Unit 5	**Licensing for Import:** Introduction, Duty exemption scheme, Export promotion capital goods scheme, Imports by 100% EOU, Special Economic Zones (SEZ).
Unit 6	**Export Documentation Framework:** Export Documentation framework: Introduction, Rationale of documents, Kinds and functions of documents
Unit 7	**Import Documents:** Import Documents: Introduction, Bill of entry, Procedure for opening an irrevocable letter of credit, Form A1-Application for remittance in foreign currency: Process and Guidelines
Unit 8	**Electronic Data Interchange System:** Electronic Data Interchange system: Introduction, Objectives and meaning of EDI, Components of an EDI system, EDI and BAR coding, EDI standards, Business use of EDI.
Unit 9	**Transit Risk Insurance:** Transit Risk Insurance: Introduction, Need for cargo Insurance, Various kinds of perils, Policies and Documents in Cargo Insurance Claim procedure and documentation
Unit 10	**Credit Risk Insurance:** Introduction, Functions of export credit guarantee corporation (ECGC), Types of Policies Offered by ECGC, Managing Credit Risks in International Trade: Case Studies
Unit 11	**Other Risks in Export-Import Business:** Other risks in Export Import Business: Introduction, Exchange fluctuation risk, Product Liability risk, Mitigation Strategies for Export-Import Risks
Unit 12	**Customs Clearance of Export Cargo:** Customs clearance of Export Cargo: Introduction, Procedure for exports under Central Excise Seal, Understanding Rebate Claims in Export, Case Studies: Effective Customs Clearance Strategies
Unit 13	**Custom Clearance for Imports:** Introduction, Role of Customs in Import Clearance, Understanding Tariffs and Custom Duties, Valuation of Goods for Customs: Methods and Best Practices, Illustration.
Unit 14	**Export Finance:** Introduction, Pre-shipment / Packing credit finance, Post-Shipment Finance, Navigating RBI Guidelines and Compliance in Export Finance, Role of Export-Import Bank of India in Export Finance
Unit 15	**Negotiations of Exports Documents under Credit:** Negotiations of Exports Documents under credit: Introduction, Various forms of post shipment finance, RBI Guidelines, Export-Import Bank of India, Collection Documents.

Reference Book:

- Taxmann's International Business, Dr. Neeta Tripathi, Taxmann Publications (2023).
- International Business, Charles W. L. Hill (13th ed.), McGraw Hill Education (2023).
- International Trade and Export Management, Francis Cherunilam, Himalaya Publishing House (23rd ed., 2025).

Information Technology

COURSE CODE- DISM 305	**SOFTWARE ENGINEERING**

Course Introduction: This course on *Software Engineering* introduces the principles and methodologies of developing high-quality software systems. Students will learn about the software development lifecycle (SDLC), requirement analysis, design, coding, testing, and maintenance. Topics such as agile methodologies, version control, and software project management are covered. Emphasis is placed on best practices and tools to ensure software reliability and scalability. By the end of the course, learners will be equipped to manage software projects and deliver robust solutions.

Course Objectives:

- Understand and apply fundamental concepts, processes, and models of software engineering in real-world scenarios.
- Analyse, plan, and manage software projects using appropriate estimation, scheduling, and risk management techniques.
- Design and develop software systems using structured and object-oriented approaches.
- Evaluate software quality through testing, verification, validation, and reliability measures.
- Apply software engineering standards, configuration management, and quality assurance practices to ensure effective software delivery.

Unit No.	Detailed Syllabus
Unit 1	**The Process and Product Overview of Software and Software Engineering:** Overview of Software and Software Engineering, Software Process and Product, Process Framework, Process Patterns, Software Process Models
Unit 2	**Software Project Management (SPM):** Project Management Concepts, Project Management Process Phases, Size-Oriented Metrics, Function-Oriented Metrics, Software Quality Metrics, Integration of Metrics with Software Engineering Process
Unit 3	**Software Project Planning (SPP):** Software Project Planning, Scheduling, Tracking, Project Estimation Techniques and Models, Software Risk Management, Phases of Risk Management

Unit 4	**Software Reliability:** Concept of Software Reliability, Software Reliability Metrics, Programming for Reliability, Fault Avoidance, Fault Tolerance
Unit 5	**Software Configuration Management:** Concept of Software Configuration Management, Software Configuration Items, SCM Process, Version Control, Change Control, Configuration Audit, Configuration Status Reporting, SCM Standards
Unit 6	**System Engineering:** Concept of Computer Systems Engineering, Hardware Engineering, Software Engineering, Human Engineering, System Architecture, System Specifications, System Specification Review
Unit 7	**Analysis Concepts and Principles:** Requirement Analysis Tasks, Communication Problems and Techniques, Analysis Principles, Understanding Information Domain, Problem Partitioning, Information Processing, Software Prototyping, Prototyping Methods and Tools, Software Requirement Specification
Unit 8	**Design Concepts and Principles:** Design Fundamentals, Design Process, Modular Design, Data Design, Architectural Design, Procedural Design, Design Documentation
Unit 9	**Software Testing Techniques:** Fundamentals of Software Testing, White Box Testing, Control Structure Testing, Black Box Testing, Automated Testing Tools
Unit 10	**Software Testing Strategies:** Unit Testing, Integration Testing, Validation Testing, System Testing, Debugging Process, Debugging Approaches
Unit 11	**Software Verification:** Code Reading, Static Analysis, Symbolic Execution, Proving Correctness, Code Inspection
Unit 12	**Capability Maturity Model (CMM):** Concept of CMM, Five Maturity Levels, Key Process Areas, Common Features
Unit 13	**CMMI-Based Process Improvement:** Process Improvement using CMM, Management Sponsorship, Commitment, Management by Fact, Process Implementation, Training, Customer-Supplier Relationship
Unit 14	**Software Quality Assurance:** Software Quality Assurance Concepts, Quality Movement, Software Reviews, Formal Technical Reviews, Software Reliability Issues, SQA Activities, SQA Plan
Unit 15	**Object-Oriented Concepts and Principles:** Overview of Object-Oriented Concepts, Object Identification and Definition, Inter-Object Communication, Object-Oriented Analysis, Modelling, Prototyping

Reference Books:

- Pressman, R. S., & Maxim, B. R. (2023). *Software engineering: A practitioner's approach* (9th ed.). McGraw-Hill Education
- Ghezzi, C., Jazayeri, M., & Mandrioli, D. (2002). *Fundamentals of software engineering* (2nd ed.). Prentice Hall of India
- Jalote, P. (2017). An integrated approach to software engineering (3rd ed.). Springer
- Leon, A., & Leon, M. (2014). *Software engineering*. Vikas Publishing House
- Sommerville, I. (2020). *Software engineering* (10th ed.). Pearson
- Fenton, N. E., & Pfleeger, S. L. (2014). *Software metrics: A rigorous and practical approach* (3rd ed.). CRC Press

Course Code- DISM 306	**DATABASE MANAGEMENT SYSTEMS**

Course Introduction: This course on *Database Management Systems* provides a thorough understanding of database concepts, design, and applications. Students will explore topics such as relational models, SQL, normalization, and transaction management. The course also covers database architectures, security, and emerging trends like NoSQL databases. Through hands-on projects, learners will gain practical experience in designing and managing databases, preparing them to handle real-world data storage and retrieval challenges effectively.

Course Objectives:

- Describe the fundamental elements of relational database management systems
- Explain the basic concepts of relational data model, entity-relationship model, relational database design, relational algebra and SQL.
- Design ER-models to represent simple database application scenarios
- Convert the ER-model to relational tables, populate relational database and formulate SQL queries on data.

Unit No.	Detailed Syllabus
Unit 1	**Introduction to Database Management Systems:** Introduction, Concept of Database Management Systems, Advantages of DBMS over Traditional File Systems
Unit 2	**Database Management System:** Core Concepts of Data Models, Schemas, Instances, Data Independence, DBMS Components, Classification of Database Management Systems
Unit 3	**Database Management System -** Data Storage and File Structure: Secondary Storage Devices, Record Storage Techniques, Record Retrieval Methods
Unit 4	**Different Types of Indexes:** Types of Indexes, Importance of Indexing in Record Retrieval
Unit 5	**Entity-Relationship:** Concepts of Entity-Relationship Model, Entities, Attributes, Relationships, ER Diagrams
Unit 6	**Relational Algebra:** Concepts of Relational Algebra, Operations in Relational Algebra, Application in DBMS
Unit 7	**Relational Calculus:** Concepts of Relational Calculus, Tuple Relational Calculus, Domain Relational Calculus, Applications in DBMS
Unit 8	**Structured Query Language (SQL):** Evolution of SQL, Importance of SQL, SQL Commands, Data Definition Language, Data Manipulation Language
Unit 9	**Normalization**: Functional Dependencies, Normalization Concepts, Normal Forms, Removal of Data Redundancy

Unit 10	**Transaction Processing for DBMS:** Concepts of Transactions, Transaction Processing, ACID Properties, Transaction Management
Unit 11	**Concurrency Control:** Concept of Concurrency Control, Importance, Concurrency Control Techniques, Locking Mechanisms
Unit 12	**Database Recovery Management:** Concepts of Data Recovery, Recovery Techniques, Log-Based Recovery, Checkpoints
Unit 13	**Distributed Databases:** Concepts of Distributed DBMS, Client-Server Model, Advantages and Challenges
Unit 14	**Object-Oriented DBMS:** Concepts of Object-Oriented Databases, Comparison with Relational Databases
Unit 15	**Database Security & Integrity:** Introduction, Data Security, Data Integrity, Useful database security techniques, Integrity models, Database Authorization, Privileges.

Reference Books:

- Silberschatz, A., Korth, H. F., & Sudarshan, S. (2020). *Database system concepts* (7th ed.). McGraw-Hill Education
- Elmasri, R., & Navathe, S. B. (2021). *Fundamentals of database systems* (7th ed.). Pearson
- Coronel, C., & Morris, S. (2019). *Database systems: Design, implementation, & management* (13th ed.). Cengage Learning

COURSE CODE- DISM 307	**TECHNOLOGY MANAGEMENT**

Course Introduction: This course on *Technology Management* focuses on leveraging technology for strategic advantage in organizations. Students will explore topics such as innovation management, technology life cycles, IT governance, and the impact of emerging technologies on business operations. The course emphasizes aligning technology initiatives with organizational goals and managing technological change. Through case studies and real-world applications, learners will develop the skills to lead technology-driven transformation and make informed managerial decisions.

Course Objectives:

- To assess the range, scope, and complexity of the phenomena, issues, and problems related to technology management
- To discuss various problems where particular managerial decisions need to be taken such as technology acquisition and transfer
- To use a range of tools used in technology creation, search, assessment, selection, implementation, utilization, and strategy

- To describe the primary tasks and decisions that are required to turn a technological innovation into a sound business opportunity

Unit No.	Detailed Syllabus
Unit 1	**Introduction to Technology Management:** Overview of Technology Management, Role and Significance, Process Technology, Product Technology
Unit 2	**Technology Acquisition:** Meaning of Technology Acquisition, Options for Technology Acquisition, Reasons for Acquiring New Technology, Management of New Technology
Unit 3	**Technology Forecasting:** Concept of Technology Forecasting, Need and Role, Forecasting Methods and Techniques, Relationship between Forecasting and Planning
Unit 4	**Technology Strategy and Competitiveness:** Technology Strategy, Innovation Management, Components of Competitive Advantage, Value Chain Analysis, Evaluation of Technology Management in Organizations
Unit 5	**Technology Adoption, Diffusion, and Absorption:** Concepts of Technology Adoption, Diffusion, and Absorption, Significance, Technology Package Components, Technological Dependence, Constraints in Technology Absorption, Management Issues, Benefits of Technology Absorption, Innovation Diffusion Process, Successful Diffusion Strategies
Unit 6	**Selection and Implementation of New Technologies:** Selection of New Technologies, Implementation Strategies, Automation Decisions
Unit 7	**Aspects and issues in Technology Management:** Aspects and Issues in Technology Management, Need for Technological Change, Technology Life Cycle, Technology Policies and Instruments, Nature and Classification of Technological Change
Unit 8	**Technology Generation and Development:** Process of Technology Generation, Determinants of Technology Development, Importance of Research and Development (R&D)
Unit 9	**Technology Transfer:** Models of Technology Transfer, Modes and Routes of Transfer, Dimensions of Technology Transfer, Features of Technology Package
Unit 10	**Technology Assessment:** Concept of Technology Assessment, Technology Choice, Assessment Process, Technology Leadership and Followership

Unit 11	**Managing Technology-**Based Innovation**:** Relationship between Technology and Innovation, Process of Technology-Based Innovation, Measures of Innovative Performance, Innovative Work Environment, Key Management Focus Areas
Unit 12	**Product Technology:** Concept of Product Development, Role of Government in Technology Development, Relationship between Technology, Development and Competition, Management of R&D, Intellectual Property Management
Unit 13	**Knowledge-Based Technology and Knowledge Management:** Overview of Knowledge-Based Technologies, Role of Artificial Intelligence Techniques, Knowledge Management Techniques in Technology Management
Unit 14	**Human Aspects in Technology Management:** Integration of People and Technology, Organizational Factors, Psychological Factors, Relationship between Organizational Structure and Technology Management
Unit 15	**Social Issues in Technology Management:** Social Issues in Technology Management, Technological Change and Industrial Relations, Technology Assessment, Environmental Impact Analysis

Reference Books:

- Yalcin, H., & Daim, T. U. (2024). *Future-oriented technology assessment: A manager's guide with case applications*. Wiley-IEEE Press
- Agarwal, P., Bajpai, L., Singh, C. P., & Gupta, K. (Eds.). (2025). *Engineering and technology management in challenging times*. Springer
- Kowalkiewicz, M. (2024). *The economy of algorithms: Rise of the digital minions*. Routledge
- Turban, E., Pollard, C., & Wood, G. (2024). *Information technology for management: Driving digital transformation to improve performance* (12th ed.). Wiley
- Narayanan, A., Kapoor, S., & Vallor, S. (2023). *AI snake oil: What artificial intelligence can do, what it can't, and how to tell the difference*. Princeton University Press

COURSE CODE- DISM 308	**BUSINESS INTELLIGENCE AND TOOLS**

Course Introduction: This course on *Business Intelligence (BI) and Tools* provides an overview of data-driven decision-making processes and BI technologies. Students will learn to collect, analyze, and visualize business data using tools such as Power BI, Tableau, and Excel. Key topics include data warehousing, dashboards, and reporting. Emphasis is placed on transforming raw data into actionable insights. Practical projects will help learners develop the technical and analytical skills to drive business strategy through informed decision-making.

Course Objectives:

- Understand the essentials of data analytics and the corresponding terminologies
- Be familiar with the steps involved in the analytics process and explain the process of data analytics, including the six steps of the Cross-Industry Standardized Process for Data Mining
- Be able to interact competently on the topic of data analytics and know the fundamental principles of data science and business analytics that form the basis for data mining processes, algorithms, and systems.
- Have had some hands-on experience in using data analytics techniques

Unit No.	Detailed Syllabus
Unit 1	**Introduction to Business Intelligence:** Definition of Business Intelligence, Evaluation of Business Intelligence, Value of Business Intelligence, Applications of Business Intelligence
Unit 2	**Business Essentials:** Business Essentials, Data to Information Conversion, Business Intelligence Environment and Platform, Role of Business Intelligence, Business Landscape
Unit 3	**Business Intelligence Types:** Types of Business Intelligence Tools, Reporting Tools, Analytical Tools, Data Visualisation Tools, Applications in Organisations
Unit 4	**Enterprise Data Architecture:** Data Models, Data Granularity, Data Reporting and Querying Techniques, Information Flow Design, Data Partitioning, Total Data Quality Management
Unit 5	**Introduction to Data Mining:** Concepts of Data Mining, Working of Data Mining, Advantages and Disadvantages, Ethical and Global Issues in Data Mining
Unit 6	**Data Mining Techniques:** Statistical Methods in Data Mining, Pattern Identification Techniques, Information Processing Models, Applications of Data Mining
Unit 7	**Introduction to Data Warehousing:** Concepts of Data Warehousing, Characteristics of Data Warehouses, OLTP vs OLAP, Multidimensional Data Models, OLAP Tools, Practical Applications of OLAP
Unit 8	**Different Ways of Data Warehousing:** Types of Data Warehousing Models, Business Models in Data Warehousing, Implementation Approaches
Unit 9	**Knowledge Management:** Concept of Knowledge Management, Need and Significance, Knowledge Creation, Storage and Utilisation, Technologies for Knowledge Management

Unit 10	**Data Extraction:** Data Extraction Process, Techniques of Data Extraction, Identification of Data Sources, Data Integration
Unit 11	**BI Life Cycle :** Business Intelligence Life Cycle, Enterprise Performance Life Cycle Framework, Human Factors in BI Implementation, BI Strategies, Roadmap Development, Project Planning, Centralised vs Decentralised BI Architecture, Stages of BI Development
Unit 12	**User Model history of Business Intelligence:** History of Business Intelligence, Opportunity Analysis in BI, Dashboards, OLAP Applications, Types of BI Users, Content Management Systems
Unit 13	**Business Intelligence Issues and Challenges:** Implementation Challenges, BI Application Development Issues, Impact of Inaccurate Information, Understanding Customer Requirements
Unit 14	**Business Intelligence Strategy and Roadmap:** BI Strategy Development, Roadmap Planning, Factors Affecting BI Strategy
Unit 15	**Implementing Business Intelligence:** BI Platform Selection, BI Products, BI Vendors, Implementation Considerations

Reference Books:

- Sharda, R., Delen, D., & Turban, E. (2024). Business intelligence, analytics, data science, and AI: A managerial perspective (5th ed.). Pearson
- Charles, V., Garg, L., Gupta, A., & Agarwal, A. (2022). Data analytics and business intelligence: Computational frameworks, practices, and applications. CRC Press
- Cheong, M. L. F. (2024). Data and decision analytics for business operations. Springer
- Zwingmann, T. (2022). AI-powered business intelligence: Improving forecasts and decision making with machine learning. Wiley
- Hassanien, A. E. (Ed.). (2022). Business intelligence and information technology. Springer

Project management

COURSE CODE- DPRM305	**INTRODUCTION TO PROJECT MANAGEMENT**

Course Description:

This course offers a detailed understanding of the fundamentals of project management. It covers the essential concepts of project planning, execution, monitoring, controlling, and closure. Learners will explore the structure of projects, project life cycles, project resources, cost estimation, and market and financial analysis. Emphasis is placed on tools like Work Breakdown Structure (WBS), earned value analysis, and project procurement techniques. The course also introduces the process of evaluating and auditing projects and managing multiple projects under constraints. Students will gain the skills needed to successfully manage projects across various industries, with a special focus on infrastructure development and the Indian project management scenario.

Course Objectives:

On completion of this course, learners will be able to:

- Explain the basic concepts, scope, and importance of project management.
- Develop skills for effective project planning, organizing, and scheduling.
- Introduce techniques for cost estimation and market analysis.
- Explain the methods of project selection and financial feasibility.
- Familiarize students with project monitoring, controlling, and termination processes.

Unit No.	Detailed Syllabus
Unit 1	**Meaning of a Project:** Concept of a Project, Characteristics of a Project, Project Cycle and Project Process, Project Resources, Scope of a project, Project Charter, Project Cost.
Unit 2	**Understanding Project:** Meaning of Project Management- Objectives of Project Management; Advantages of Project Management, Principles of Project Management, Knowledge Areas of Project Management, Project Management Framework: Project Constraints- 'Triple Constraints'; Management by Objectives (MBO), Project Management Body of Knowledge (PMBOK), Project Integration Management.
Unit 3	**Project Management Life Cycle:** Project Initiation - Building a Strong Foundation, Project Planning - The Backbone of Project Management, Project design; Project Testing, Project development; Project closure, Rita`s Process Chart.
Unit 4	**Project Planning**: Concept of Project Planning, Steps of Project Planning, Types of Project Plans: Financial Plan; Quality Plan; Contingency Plan; Communication Plan; Procurement Plan, Requirements of Project Planning, Tools and Concepts in Project Management, Key Personnel and Resources in Project Planning, Task Duration and Activity Scheduling in Project Planning
Unit 5	**Market Analysis and Demand Forecasting:** Market Information, Factors Affecting Market Information, Demand Forecasting, Product Line and Mix Analysis, New Product Development, Plant Location and Capacity, Environmental Aspects
Unit 6	**Financial Feasibility:** Financial Feasibility of a Project, Estimation of a Cost of a Project, Understanding Production Costs in Business Projects, Cash Flows in Project Management, Debt and Repayment Considerations.
Unit 7	**Project Selection:** Introduction of project Selection, overview of project Selection, Capital Budgeting, Capital rationing, Needs And Criteria For Project Selection, Case Study.
Unit 8	**Multiple Projects and Constraints**: Introduction, Overview of Constraints Project dependence; Capital rationing; Ranking Method
Unit 9	**Social Cost Benefit Analysis**: Introduction of SCBA, Applications of SCBA; Challenges in SCBA, Various Approaches of SCBA, Future Direction.

Unit 10	**Infrastructure Project:** Introduction to Infrastructure Projects, Financing Sources in India, Recent Developments in Infrastructure Financing, Types of Infrastructure Projects.
Unit 11	**Project Procurement Management:** Introduction of procurement management, Overview of procurement management, Concept of Procurement Management, Solicitation Planning, Solicitation Process, Source Selection, contract administration, contract closeout.
Unit 12	**Project Evaluation and Auditing:** Introduction of Project Evaluation, Advantages of Project Evaluation, Concept of Project Audit- Audit Team; Project Audit Life Cycle; Audit Report; Auditing in Indian Scenario, Differences between Project Evaluation and Project Audit.
Unit 13	**Project Monitoring:** Introduction of Project Monitoring, Planning-Monitoring-Controlling Cycle- Project Monitoring; Designing of Monitoring System; Information Collection and analysis; Reporting and its Types; Earned Value Analysis.
Unit 14	**Project Controlling:** Project Controlling- Types of Control; Control System Designing; Types of Control Systems; Tools for Control, Management Control System- Identifying Key Performance Areas; Identifying Strategic Control Points.
Unit 15	**Project Termination**: Meaning of Project Termination, Factors Considered for Terminating a Project, Project Termination Process, Project Final Report.

Reference Books:

- Project Management Institute. (2021). A guide to the project management body of knowledge (PMBOK® guide) (7th ed.). Project Management Institute.
- Kerzner, H. (2025). Project management: A systems approach to planning, scheduling, and controlling (14th ed.). Wiley.
- Larson, E. W., & Gray, C. F. (2020). Project management: The managerial process (8th ed.). McGraw-Hill Education.
- Wysocki, R. K. (2020). Effective project management: Traditional, agile, extreme, hybrid (8th ed.). Wiley.

COURSE CODE-DPRM306	**PROJECT PLANNING AND SCHEDULING**

Course Introduction: This course on *Project Planning and Scheduling* equips students with the essential tools and techniques for effectively planning and managing project timelines. It covers fundamental concepts such as defining project scope, setting objectives, and breaking down tasks using Work Breakdown Structures (WBS). Students will explore scheduling methodologies, including Gantt charts, Critical Path Method (CPM), and Program Evaluation Review Technique (PERT). The course also addresses resource allocation, milestone setting, and risk management in project planning. Through practical exercises and case studies, learners will gain the skills to develop realistic project plans, optimize schedules, and ensure timely project completion while managing constraints and dependencies.

Course Objectives:

After studying this subject, the student should be able to:

- Establish project goals.
- Perform project planning and scheduling.
- Apply various strategies to resolve a project conflict.
- Discuss PMI, PMBOK, ISO, IPMA, and PRINCE2.
- Use project management software for managing projects.

Unit No.	**Detailed Syllabus**
Unit I	**Introduction to Project Management:** Importance, characteristics, objectives and constraints, role and responsibilities of project manager, project life cycle
Unit II	**Project Organization:** Defining Project Organization, Project Organization Structures – Traditional Organization Structures, Functional Organization Structures, Pure Project Management Organization, Matrix Organization Structure, Line and Staff Project Organization; Project Management Offices (PMO) – Supportive PMO, Monitoring PMO, Directive PMO.
Unit III	**Managing Conflicts through Negotiation:** Types of Conflicts in a Project, Art of Negotiation, Principles of Negotiation, Partnering, Chartering, and Scope Change.
Unit IV	**Project Planning:** Concept and Steps of Project Planning, Project Planning Tools – Key Project Personnel, Project Management Team, Key Stakeholders, Key Resources, Task Duration, Project Team Development; Project Planning Estimation – Purpose of Estimation, Essentials of Estimation, Estimation Tools, Estimation Approaches.
Unit V	**Generation and Screening of Project Ideas:** Generation of Ideas, Monitoring the Environment, Corporate Appraisal, Tools for Identifying Investment Opportunities, Exploring Project Ideas, Initial Screening, Project Rating Index, Sources of Positive NPV.
Unit VI	**Market Feasibility of Projects:** Understanding Market Feasibility, Factors Affecting Market Feasibility, Market Research, Idea Generation and Product Development – Generation of New Ideas and Product Development.
Unit VII	**Operating and Environmental Feasibility:** Meaning of Operating Feasibility, Capacity Requirements in a Project, Selecting Plant Location, Technological Requirements, Environmental Feasibility of Projects.
Unit VIII	**Project Scheduling:** Concept of Project Scheduling, Project Time Management, Requirements of Project Scheduling, Developing Project Network, Precedence Diagramming Method (PDM), Arrow Diagramming Method (ADM), Estimating Time, Gantt Charts, Milestone Charts.
Unit IX	**Project Network Analysis:** Understanding Project Network Analysis, CPM Model – Fast Tracking, Crashing, Monte Carlo Analysis; PERT Model – Controlling Schedule, 50/50 Rule, 20/80 Rule, 0/100 Rule.
Unit X	**Resource Scheduling and Levelling:** Concept of Resource Scheduling, Process of Resource Scheduling – Resource Loading, Resource Levelling, Resource Allocation, Goldratt's Critical Chain Project Management (CCPM).

Unit XI	**Project Operation and Maintenance:** Project Integration Management, Managing Project Scope, Managing Time, Managing Cost, Managing Quality, Managing Human Resources.
Unit XII	**Project Monitoring:** Meaning and Requirements of Project Monitoring, Project Quality Management – Benchmarking, Design of Experiments (DOE), Cost of Quality (COQ), Performing Quality Control, Earned Value Management, Reporting.
Unit XIII	**Project Management Standards and Norms:** Project Management Institute (PMI), PMBOK, ISO Standards, International Project Management Association (IPMA), PRINCE2.
Unit XIV	**Computer Applications in Project Management:** Introduction to Project Management Software, Advantages and Disadvantages of Project Management Software, Project Management Information System (PMIS), Introduction to Microsoft Project Software.
Unit XV	**Project Management Life Cycle:** Meaning of Project Management Life Cycle, Phases of Project Management Life Cycle, Managing Project Management Life Cycle, Project Scope Management.

References:

- Kerzner, H. (2001). Project management workbook to accompany Project management, a systems approach to planning, scheduling and controlling, seventh edition. New York: Wiley.

- Morris, P., and Pinto, J. (2007). The Wiley guide to project organisation & project management competencies. Hoboken, N.J.: J. Wiley.

COURSE CODE-DPRM307	**PROJECT FINANCE AND BUDGETING**

Course Description:

This course introduces the principles and practices of project finance and budgeting, focusing on cost estimation, funding sources, and budget creation. It covers project cash flows, capital structure, risk analysis, and financial planning for various types of projects. Students will also learn about PPP models, BOOT structures, legal frameworks, and project insurance. By bridging theory and practice, this course prepares learners to evaluate the financial feasibility of projects, create efficient budget structures, manage cash flows, and navigate the complexities of modern project finance environments.

Course Objectives:

On completion of this course, learners will be able to:

- Understand various types of resources required for projects and how to estimate project costs.
- Learn how to create comprehensive project budgets using cost estimation techniques.
- Explore financing models for different sectors including construction, power, and telecom.
- Analyze project cash flows and determine optimal capital structures.

- Identify, assess, and manage various types of project risks using qualitative and quantitative tools.
- Define the roles of legal, financial, engineering, and insurance advisors in project finance.

Course Contents:

Unit No.	Detailed Syllabus
Unit 1	**Project Resources:** Requirement of Resources in a Project, Types of Resources, Estimation of Project Costs, Financial Feasibility of a Project, Cost-Benefit Analysis.
Unit 2	**Project Finance:** Meaning of Project Finance, Requirements of Project Finance, Features of Project Finance, Role of Project Sponsors, Financial Instruments.
Unit 3	**Sources of Project Finance:** Different Sources of Project Finance- Long term financing; mid-term financing, short term financing, The global Project Finance Market, Selecting the Right Source of Project Finance, Public and private funding.
Unit 4	**Creating Project Budget:** Meaning of Project Budget; Importance of Project Budget; Determining Project Cost Profile- Types of Costs; Bottom-up Estimating, Contingency Budgeting
Unit 5	**Financing of Different Types of Projects**: Financing Construction Projects, Financing Power Projects, Financing Telecommunication Projects, Financing Green And Sustainable Projects.
Unit 6	**Project Cash Flows and Capital Structure:** Project Cash Flows- Cash Inflows; Cash Outflows, Factors Affecting Project Cash Flows, Optimal Capital Structure, Tax Implications
Unit 7	**Project Risks:** Meaning of Project Risks, Types of Project Risks, Sources of Project Risks, Measuring Project Risks, Qualitative Risk Analysis, Quantitative Risk Analysis, Allocation of Project Risks, Risk Monitoring and Control, Risk mitigation strategies.
Unit 8	**Project Selection:** Concept of Capital Budgeting, Time Value of Money, Importance Of Cash Flows In Project Selection, Importance of Cash Flows in Project Selection, Risks Involved in Project Selection, Social and environmental considerations
Unit 9	**Working Capital Management:** Meaning of Working Capital, Types of Working Capitals, Factors Affecting Working Capital, Measuring Working Capital requirements in Projects, Project Cost Management and Control: Earned Value Technique, Impact of Market Conditions.
Unit 10	**Project Parties and Project Contracts:** Meaning of Project Parties, Project Contracts- EPC Contracts; O&M Contracts; Contracts with Suppliers, Needs of Project Contracts , Non- disclosure Agreement, Letter of Intent.
Unit 11	**Legal Aspects of Project Finance:** Formation of Project Company- Reasons of Formation of a Project Company; Articles of Incorporation, Special Purpose Vehicle (SPV), Key Project Documents, Regulatory Compliance.
Unit 12	**Public Private Partnership (PPP):** Meaning of PPP, Types of PPP, Advantages of PPP, Disadvantages of PPP, Some PPP projects in India.
Unit 13	**Build, Own, Operate, Transfer (BOOT):** Concept of BOOT, Structure of BOOT Projects, Concession Contracts, Problems in BOOT projects, Exit Strategies.

Unit 14	**Roles of Advisor in Project Finance:** Roles of Legal Advisors, Roles of Engineering Advisor, Roles of Financial and Insurance Advisors, Roles of Tax Advisor.
Unit 15	**Project Insurance:** Understanding Project Insurance, Requirement of Insurance in Projects, Major Challenges in Project Insurance, Project Insurance in Different Phases, Project Insurance Product.

Reference Books:

- Nevitt, P. K., & Fabozzi, F. J. (2000). Project financing (7th ed.). Euromoney Books.
- Brealey, R. A., Myers, S. C., & Allen, F. (2020). Principles of corporate finance (13th ed.). McGraw-Hill Education.
- Pandey, I. M. (2021). Financial management (12th ed.). Pearson Education.
- Khan, M. Y., & Jain, P. K. (2020). Financial management: Text, problems and cases (9th ed.). McGraw-Hill Education.

COURSE CODE- DPRM308	**MANAGING HUMAN RESOURCES IN PROJECTS**

Course Description:

This course focusses on the importance and application of human resources management within the context of project management. It stresses on how project team can effectively utilize HR principles to achieve project goals by focusing on planning, acquiring, developing, and managing the project team. It will help learners to understand the need to apply HR best practices to enhance project success and efficiency. The ultimate goal will be to enable the future project manager to make informed decisions while launching and managing the project. Students will possess foundational knowledge for working as a project manager by the end of this course.

Course Objectives:

On completion of this course, learners will be able to:

- Understand the concept of a project.
- Acquaint themselves with the skills of Managing Human resources for a project.
- Understand the roles performed by a project manager.
- Acquaint themselves on how to Assign responsibilities to project team members.

Course Contents:

Unit No.	Detailed Syllabus
Unit 1	**Managing HR in Project:** Concept of Project- Objectives and characteristics of a Project; Scope of a Project, Project: A Cyclic Process, Project Resources- Financial Resources; Human Resources.

Unit 2	**Human Resource in Project Management:** Meaning of Human Resource, Understanding Human Resource Management, Need of Human Resources in a Project, Challenges of managing HR in a Project, Project Management Skills.
Unit 3	**Key Project Personnel:** Project Sponsor, Project Manager.
Unit 4	**Development of Project Team:** Meaning of Project Team, Need of a Project Team, Developing a Project Team- Steps in Team Development; Challenges in Developing Project Team; Team effectiveness, Skills of Project Team Members.
Unit 5	**Roles and Functions of a Project Manager:** Roles of a Project Manager, Functions of a Project Manager, Skills Requirements of Project Managers , Responsibilities of a Project Manager.
Unit 6	**Conflict Resolutions in a Project Team:** Meaning of Conflict, Reasons of Conflict- Cultural Differences; Halo Effect; Matrix Team Problem; Intra-Team Conflict, Managing Conflicts, Levels of conflict, Stages in a conflict Process, Resolutions in a Project Team, Motivational theories for preventing conflict.
Unit 7	**Division and Assignment of Project Work:** Estimation of Manpower Requirements, Need for Division and Assignment of Project Work, Work Breakdown Structure, Estimation of Time, Assignment of Project Work.
Unit 8	**Role of Communication in Project:** Communication of Information in a Project, Need for Effective Communication in a Project, Ensuring Effective Communication in a Project, Managing Flow of Information in a Project, Human resource Information System (HRIS), Barriers to Effective Communication, Issue Logs.
Unit 9	**Leadership and Teamwork in a Project**: Meaning of Leadership, Different Leadership Styles, Roles of a Leader, Importance of Leadership in Project Management.
Unit 10	**Motivating the Project Team:** Understanding Motivation, Motivational Theories, Role of Motivation in a Project Environment, Role of Project Manager in Motivating project Team.
Unit 11	**Measuring and Managing Performance**: Importance of Measuring Team Performance, Benchmarking, Methods of Performance Measurements, Managing employee performance, Dealing with Poor Performers in a Project Team.
Unit 12	**Strategic Human Resource Management (SHRM) in Project Management**: Meaning of SHRM ; Competitive Advantages of SHRM, Formulating SHRM Strategies, SHRM as a part of Project Management, Involving Project: Team Members.
Unit 13	**Managing Employee Relations:** Employee Relations, Trade Unions, Collective Bargaining.
Unit 14	**Managing Workforce Diversity:** Meaning of Workforce Diversity, Minority Groups, Conflicts Due to Workforce Diversity, Promoting Equal Opportunity, Project Management in an International Environment.
Unit 15	**Health, Safety, Welfare, and Work-life Balance of Employees**: Employees Health, employees' safety, Managing Health Hazards , Employee Welfare in Project Management, Work-life Balance of Project Team Members.

Reference Books:

- Armstrong, M., & Taylor, S. (2023). *Armstrong's handbook of human resource management practice* (16th ed.). Kogan Page.

- Aswathappa, K. (2021). *Human resource management: Text and cases* (10th ed.). McGraw-Hill Education.
- Robbins, S. P., Judge, T. A., & Vohra, N. (2022). *Organizational behavior* (19th ed.). Pearson Education.
- Lussier, R. N., & Achua, C. F. (2022). *Leadership: Theory, application, & skill development* (7th ed.). Cengage Learning.

SCM

COURSE CODE- DSCM 305	LOGISTICS AND SUPPLY CHAIN MANAGEMENT

Course Description:
This course explores the principles and practices of logistics and supply chain management, focusing on the efficient flow of goods, information, and finances. Students will learn strategies for sourcing, operations, distribution, and customer service, with an emphasis on global supply chains, sustainability, technology integration, and risk management to enhance organizational competitiveness.

Course Objectives:
- On completion of this course, learners will be able to:
- Understand the fundamental concepts, strategies, and functions of logistics and supply chain management.
- Analyze the role of supply chain management in enhancing business efficiency and customer satisfaction.
- Develop skills to design, manage, and optimize global supply chains using modern technologies and best practices.
- Evaluate sustainability, risk, and ethical considerations in supply chain decision-making.

Course Contents:

Unit No.	Detailed Syllabus
Unit 1	**Overview of Supply Chain Management:** Definition of Supply Chain and Supply Chain Management, Evolution of Supply Chain Management, Role of Information Technology in Supply Chain Management
Unit 2	**Logistics of Distribution:** Concept of Logistics, Importance of Logistics, Logistics Process, Logistics Information Systems, Technological Impact on Logistics, Domestic and International Logistics Challenges
Unit 3	**Planning and Designing the Supply Chain:** Supply Chain Integration, Supplier Selection and Development, Demand Forecasting, Planning and Designing Supply Chains

Unit 4	**Partnerships in Supply Chain Management:** Benefits of Supply Chain Partnerships, Supply Chain Coordination, Overcoming Coordination Barriers, Outsourcing Relationships, Strategic Alliances
Unit 5	**Collaborative Planning, Forecasting and Replenishment (CPFR):** Concept of CPFR, Origin and Models of CPFR, Benefits and Scope, Customer Service Management, Replenishment Strategies
Unit 6	**Influence of Supply Chain Management:** Customer Value Creation, Customer Satisfaction, Influence of Supply Chain on Customer Behaviour
Unit 7	**Procurement Management:** Concept of Procurement, Procurement Process, Contract Management, Strategic Sourcing
Unit 8	**Assessment of Supply Chain Management:** Methods of Supply Chain Assessment, Performance Metrics, Evaluation Techniques
Unit 9	**Mapping For Supply Chain Management:** Relationship-Based Mapping, Supply Chain Mapping in Telecom, Time-Based Process Mapping, Pipeline Inventory Mapping, Value Stream Mapping
Unit 10	**Development of Supply Chain Management Systems:** Concept and Nature of Supply Chain Systems, Benefits of SCM Systems, Design and Analysis of SCM Systems
Unit 11	**Information Systems in Supply Chains:** Role of Information Systems in SCM, E-Business in Supply Chains, Impact of Digital Technologies
Unit 12	**Role of Marketing in SCM:** Concept of Marketing, Role of Marketing in SCM, Integrated Marketing-Supply Chain Framework
Unit 13	**Reverse Supply Chain:** Concept of Reverse Supply Chain Management, Need and Importance, Impact on Profitability, Sustainability Aspects
Unit 14	**SCM: The Next Steps**: GSCF Framework, SCOR Model, Comparison of Frameworks, Value Creation in Supply Chains
Unit 15	**IT for Supply Chain Management:** Role of IT in SCM, Evolution of IT in Supply Chains, Emerging Technologies in SCM, Impact of IT on Supply Chain Performance

Reference Books:

- Chopra, S., & Meindl, P. (2024). *Supply chain management: Strategy, planning, and operation* (7th ed.). Pearson
- Jacobs, F. R., Chase, R. B., & Shankar, R. (2023). *Operations and supply chain management* (17th ed.). McGraw-Hill Education
- Christopher, M. (2023). *Logistics and supply chain management* (6th ed.). Pearson

- Bowersox, D. J., Closs, D. J., Cooper, M. B., & Bowersox, J. C. (2026). *Supply chain logistics management* (6th ed.). McGraw-Hill Education
- Krajewski, Lee J. & Ritzman, Larry P.; Operations Management – Processes and Value Chains; Pearson Education; New Delhi.

COURSE CODE- DSCM306	**OUTSOURCING**

Course Description:
This course provides an in-depth exploration of outsourcing as a strategic business practice in today's global economy. Students will examine the fundamental concepts, benefits, and risks associated with outsourcing various business functions, including IT services, customer support, manufacturing, and more. The course covers key topics such as vendor selection, contract negotiation, service level agreements (SLAs), risk management, cultural considerations, legal and ethical issues, and performance evaluation.

Course Objective:
On completion of this course, learners will be able to:
- Identify the challenges of outsourcing and manage them.
- Apply outsourcing as a management strategy.
- Develop a global outsourcing strategy.
- Identify outsourcing opportunities.
- Create outsourcing teams.
- Use checklists while engaging with outsourcing partners.

Course Contents:

Unit No.	Detailed Syllabus
Unit 1	**Introduction to Outsourcing:** An Overview of Outsourcing, History of Outsourcing, Relationship between Supply Chain Management and Outsourcing, Uncovering the Core, Benefits of Outsourcing, Redefining Management, Challenges of Outsourcing and Ways to Manage Them, Outsourcing Failures, and Outsourcing Barriers
Unit 2	**Outsourcing to Business Process**: Business Process Outsourcing, Working from the Customer-In, Functional Process Outsourcing, Breaking Down Barriers, Transaction, Technology and E-Sourcing, Scaling and Integrating the Supply Chains, Commercialising the Hidden Value
Unit 3	**Offshoring Factors:** Global Sourcing, Offshoring's Value Model, Demand Forecasting for Optimal Inventory Holding, Placing the Jobs Issue in Perspective

Unit 4	**Outsourcing Value Model:** Principles for Capturing the Value of Global Outsourcing, Employing Sourcing as a Strategy, Improving the Value Model, Zero-Based Sourcing, Market-Driven Decision Making, Outsourcing as a Management Discipline
Unit 5	**Developing a Global Strategy:** Top-Down Approach, Bottom-Up Approach, Outsourcing Decision Matrix, Evaluating a Company's Activities, Advantages of Integration
Unit 6	**Outsourcing Opportunities:** Riding Outsourcing's Waves, Seeing Opportunities in Process Terms, Prioritising the Best, Gauging and Overcoming Risk, Outsourcing at the Customer Interface
Unit 7	**Creating Teams for Outsourcing:** The Outsourcing Process, The Outsourcing Teams, The Outsourcing Project Leader
Unit 8	**Outsourcing is More Like Hiring Than Buying:** Outsourcing is More Like Hiring Than Buying, Capturing and Communicating Requirements, Approaches Other than Request for Proposals (RFP), Creating the Scorecard, Deciding on Providers, Competencies, Capabilities, Relationship Dynamics, Checklist Used for Engaging the Outsourcing Partner
Unit 9	**Outsourcing Economics:** Capturing Current Costs, From Budgeted Costs to Full Costs, Forecasting Outsourcing Benefits, Making Intangibles Tangible, Setting Conversion of Intangibles to Tangibles in Practice
Unit 10	**Pricing, Contracting and Negotiating:** Identifying Checklists for Negotiation, The Relationship Continuum, The Modular Contract, Terms Section, Scope of Services, Pricing Section, Negotiation Principles, Checklist for an Outsourcing Contract
Unit 11	**Managing the Impact of Outsourcing on People:** The Value of Communication, Employees' Perspective, Achieving Employee Support, Managing the Transition, Managing Public Perception of Outsourcing
Unit 12	**Managing the New Relationships:** Shifting to Outsourcing, Interdependent Management, Interdependent Planning
Unit 13	**The Future of Outsourcing:** Employees as Specialists, Specialised Companies and Specialised Employees, From Cost Centre to Profit Centre, Staying Competent, Self-Employment Model, Executives Become Integrators, Lateral Leadership, Project and Process Leadership, Global Leadership, Impact of Outsourcing on Enterprises, Outsourcing for Innovation, Knowledge Management, Networked Risk
Unit 14	**Outsourcing in Action:** Case Studies – Bharti Airtel, Mahindra & Mahindra, Tata Nano, Boeing, General Motors, Regional Bell Operating Company, Sun Microsystems, IBM, Dell

Reference Books:

- Burt, Dobler, & Starling. (2003). World Class Supply Management: The Key to Supply Chain Management, 7 th ed. Tata McGraw-Hill
- Corbett, M. F. (2004). The Outsourcing Revolution: Why It Makes Sense and How to Do it Right. Dearborn Trade Publishing.
- Brown, D., & Wilson, S. (2005). The Black Book of Outsourcing. Hoboken, New Jersey: John Wiley & Sons, Inc.
- Corbett. F M. (2004). The Outsourcing Revolution. Dearborn Trade Publishing.

- Mclvor, R. (2005). The Outsourcing Process: Strategies for Evaluation and Management. Cambridge University Press, U.K.

COURSE CODE-DSCM307	DIGITAL TRANSFORMATION IN SUPPLY CHAIN MANAGEMENT

Course Description:
Digital Supply Chain Management (Digital SCM) focuses on the integration of advanced digital technologies such as Artificial Intelligence (AI), Internet of Things (IoT), Big Data Analytics, Blockchain, and Cloud Computing into traditional supply chain processes. This course provides a comprehensive understanding of how digital transformation enhances supply chain visibility, agility, efficiency, and resilience in a rapidly evolving global environment.
The course covers key areas such as digital supply chain design, real-time data analytics, automation, smart logistics, and collaborative digital platforms. It also addresses challenges including cybersecurity risks, data integration issues, and organisational resistance to change. By combining theoretical insights with practical applications, the course equips learners with the knowledge and skills required to manage and innovate supply chains in the digital era.

Course Objectives:
On completion of this course, learners will be able to:
- Explain the core technologies driving digital transformation in supply chain management, including IoT, AI, blockchain, and big data analytics.
- Develop strategic frameworks to integrate digital solutions into existing supply chain operations, enhancing efficiency and decision-making.
- Utilize digital tools and platforms to improve demand forecasting, inventory management, logistics, and supplier collaboration.
- Assess cybersecurity risks and implement sustainable practices within digital supply chain networks to ensure security and environmental responsibility.
- Demonstrate leadership skills in managing digital transformation initiatives, addressing resistance to change, and fostering a culture of continuous innovation.

Course Contents:

Unit No.	Detailed Syllabus
Unit 1	**Introduction to Digital Transformation in Supply Chains:** Concept, Drivers, and Benefits of Digital Transformation, Key Challenges and Success Factors

Unit 2	**Digital Supply Chain Framework:** Core Components and Digital Maturity Models, Developing a Digital Transformation Roadmap
Unit 3	**Role of Big Data and Analytics:** Data-Driven Decision-Making and Predictive Analytics, Case Studies on Data Analytics in Supply Chains
Unit 4	**Internet of Things (IoT) in Supply Chain Management:** IoT Architecture and Applications, Real-Time Monitoring and Asset Tracking
Unit 5	**Artificial Intelligence and Machine Learning:** AI for Demand Forecasting and Inventory Optimization, Automation and Cognitive Supply Chains
Unit 6	**Blockchain Technology for Supply Chains:** Blockchain Fundamentals and Supply Chain Transparency, Use Cases and Implementation Challenges
Unit 7	**Cloud Computing in Supply Chains:** Cloud-Based Solutions for Collaboration and Data Storage, Benefits and Security Considerations
Unit 8	**Digital Twin Technology:** Concept and Applications in Supply Chain Simulation, Enhancing Operational Efficiency with Digital Twins
Unit 9	**Supply Chain 4.0 and Industry 4.0 Integration:** Evolution of Supply Chain Management in the Industry 4.0 Era, Integrating Smart Factories and Logistics
Unit 10	**Cybersecurity in Digital Supply Chains:** Identifying and Mitigating Supply Chain Cybersecurity Risks, Best Practices for Securing Digital Networks
Unit 11	**E-commerce and Digital Logistics:** Digital Transformation in Logistics and Distribution, Innovations in Last-Mile Delivery and Fulfilment
Unit 12	**Sustainable and Resilient Supply Chains:** Role of Digital Technologies in Sustainability, Building Resilient Supply Chains through Digital Solutions
Unit 13	**Change Management for Digital Transformation:** Overcoming Resistance to Change, Training and Upskilling for Digital Supply Chain Management
Unit 14	**Case Studies and Future Trends:** Real-World Case Studies of Digital Supply Chain Transformations, Emerging Trends and Future Outlook

Reference Books:

- Christopher, M., & Ryals, L. (2021). Supply Chain Strategy and Financial Metrics: The Supply Chain Management Series. Routledge.
- Ivanov, D., Tsipoulanidis, A., & Schönberger, J. (2019). Global Supply Chain and Operations Management: A Decision-Oriented Introduction to the Creation of Value. Springer.
- McKinsey & Company. (2021). Digital Supply Chains: From Transformation to Value Creation. McKinsey Publishing.
- Sodhi, M. S., & Tang, C. S. (2022). Managing Supply Chain Disruptions: Theory and Practice. Springer.

COURSE CODE- DSCM308	INVENTORY MANAGEMENT

Course Description:

Inventory Management is a crucial subject that equips students with the knowledge to manage stock levels efficiently across supply chains. The course covers inventory types, classification techniques, and the economic order quantity (EOQ) model. It explores forecasting methods, safety stock calculation, and demand variability. Students learn about modern inventory systems like Just-in-Time (JIT) and Vendor Managed Inventory (VMI). Key performance indicators and inventory costing methods are also discussed. Emphasis is placed on minimizing costs while maintaining service levels. Different types of inventory stratification strategies and focus on different types of barcoding symbologies are an important part of curriculum. There is also discussion on different types of food product development projects and various methods to protect inventory.

Course Objectives:

On completion of this course, learners will be able to:

- Understand the role and importance of inventory in supply chain management.
- Explore various inventory classification and control techniques.
- Analyze and apply inventory costing methods and valuation principles.
- Evaluate inventory models such as EOQ, safety stock, and reorder point.
- Study the impact of lead time, demand variability, and service levels on inventory decisions.
- Gain insight into modern inventory practices such as JIT and VMI.
- Gather insight into various barcoding symbologies.

Course Contents:

Unit No.	Detailed Syllabus
Unit 1	**Production Model for Inventory Derivation, Application of EOQ, and Production Models:** Overview of Inventory Management, Purpose and Functions, Inventory Systems and Goals, Objectives of Inventory Management, Inventory Categories (Based on Source of Demand, Position, and Function), Types of Inventories
Unit 2	**Inventory as both Tangible and Intangible Object:** Need for Inventory, Inventory Costs, Purpose of Inventory, Electronic Data Interchange

Unit 3	**Independent Demand Inventory System:** Inventory Information Systems, Manufacturing Environment, Independent Demand Replenishment Models, Environmental Effects on Inventory, Order Cycles and Lead Times
Unit 4	**Inventory Planning and Control Techniques**: Forecasting Principles, Determining Inventory Levels, Economic Order Quantity (EOQ), Standard Deviation, ABC Analysis (Objectives, Policies, Advantages), Inventory Cost Determination, Lot Size Considerations, Safety Stock and its Management
Unit 5	**Inventory Management Models:** EOQ Model Derivation, Safety Stock Concepts and Calculations, Optimal Safety Stock Policies, Production Inventory Model, Application of EOQ and Production Models
Unit 6	**Inventory Accounting Principles:** Inventory Accounting and Valuation, Inventory in Financial Statements (Balance Sheet, Income Statement, Cash Flow), Obsolete Stock Management, Carrying Costs, Relationship between Purchasing and Carrying Costs
Unit 7	**Inventory Management and Financial Analysis:** Financial Control of Inventory, Manufacturing Equation, Financial Ratios (Profitability, Liquidity, Activity, Leverage), Supplier Cash Flow Analysis, Bill of Materials, Overhead Allocation, Activity-Based Costing in Manufacturing and Services
Unit 8	**Physical Location and Control of Inventory:** Locator Systems, Item Placement Theories, Inventory Stratification, SKU Identification, Factors for Effective Inventory Systems, Linking SKUs with Location Addresses
Unit 9	**The Warehouse Environment:** Warehouse Layout Planning, Data Gathering, Block Diagram Layout, Detailed Layout Design, Warehousing Costs (Picking, Packing, Loading), Warehouse System Setup
Unit 10	**Distribution Inventory Planning and Control:** Product Development Types and Processes, Volume of Development Activities, Role of Information Technology in Food Supply Chain Management
Unit 11	**Basics of Bar Coding:** Barcode Elements, Symbologies and Structural Rules, Common Barcode Types, Scanning Basics, Applications in Inventory Management
Unit 12	**Planning and Replenishment Concepts:** Replenishment Costs, Inventory Types, Independent and Dependent Demand Inventory
Unit 13	**Causes and Remedies for Failure of Inventory Systems:** Causes of Failure, Metrics (Inventory Record Accuracy, Fill Rate), Diagnostic Tools (Run Charts, Flow Charts, Logic Charts, Variance Reports), Cycle Counting Methods (Control Group, Location Audit, Random, Diminishing Population, Product Categories, ABC-Based)
Unit 14	**Protecting Inventory:** Legal Responsibilities, Inventory Protection Planning, Risk Assessment (Probability and Impact), Theft Types, Threat Assessment and Countermeasures

References:

- Chopra, S. (2022). Supply Chain Management, 4th ed. India: Pearson Education.Inc.
- Donald, C., & Waters, J. (2023). Inventory Control and Management. England: John Wiley and Sons Ltd.
- Muller, M. (2023). Essentials of inventory management (3rd ed.). HarperCollins Leadership

- Gattorna, J.L. (2003). Handbook of Supply Chain Management, 5th ed. USA: Gower Publishing.
- Wild, T. (2017). Best practice in inventory management (3rd ed.). Routledge

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COURSE CODE-DBFI305	**BANK MANAGEMENT AND FINANCIAL RISK MANAGEMENT**

Course Description:
This course offers an in-depth exploration of banking operations and the critical aspects of financial risk management. Students will gain insights into the structure and functions of modern banks, focusing on strategic management, regulatory frameworks, and key performance indicators. The course covers various types of financial risks—including credit, market, operational, and liquidity risks—and introduces tools and methodologies for assessing and mitigating these risks. Through real-world case studies and practical applications, learners will develop the skills needed to manage banking portfolios effectively, ensure compliance with regulations, and maintain financial stability in a dynamic environment.

Course Objectives:
On completion of this course, learners will be able to:
- Describe the Basic of Banking, their types and functioning of commercial banking.
- To understand the basic concept of Investment, Lending and liquidity management and credit evaluation process.
- Recognise the key risks faced by a bank and assess what the bank is doing to measure, monitor and mitigate these risks.
- Understand the approach to risk management through risk identification, risk measurement and risk management (or mitigation)

Course Contents:

Unit No.	Detailed Syllabus
Unit 1	**Bank:** Introduction to Bank Management, Basic Concept, Types of Banks, Role of Banks
Unit 2	**Banking Regulators:** Reserve Bank of India Act, 1934, Banking (Regulation) Act, 1949, Foreign Exchange Management Act, 1999.
Unit 3	**Banking Products:** Classification of banking products based on Assets and Liabilities.
Unit 4	**Banking Management:** Concept, Basic banking operations of commercial banks in India

Unit 5	**Financial System and Economic Development:** Interrelationship between financial system & economic development, Interest rate components & dynamics
Unit 6	**Evaluating Bank Performance:** Managing Cost of Funds and Liquidity in banks Operation and performance of commercial banks
Unit 7	**Understanding Bank's financial statements:** DuPont model for evaluating bank performance. Basic risk and return features of commercial banks. Overall liquidity analysis. Estimating marginal cost of funds for pricing assets and taking investment decisions.
Unit 8	**Legal reserve requirements:** Manage cash assets, A model to estimate liquidity needs and plan for temporary cash deficiencies and longer-term liquidity needs
Unit 9	**Credit and NPA Management:** Basic credit analysis principles and the characteristics of different types of loans. Procedure for estimating a business borrower's cash flow from operations. Basic credit scoring models applied to individual borrowers. Interpreting financial statements and generating cash flow estimates to determine repayment prospects. Customer profitability analysis the basic framework used to assess whether a bank is profiting from a customer's total relationship. NPA regulations governing banks and NPA management.
Unit 10	**Risks in Banking:** Trade-offs involved in balancing credit risk, liquidity risk, interest rate risk, market risk, operational risk etc. Pricing of securities, total return analysis to investors and the determinants of interest rates. GAP analysis and the use of sensitivity analysis to assess the potential impact of interest rate and balance sheet changes on net interest income. Regulatory capital requirements under Basel III norms.
Unit 11	**Foundations of Risk Management:** An understanding of corporate risk governance and the trade-off between risk and return, The construction of efficient portfolios, Fundamental asset pricing models, Enterprise risk management frameworks, Data quality management, A review of major financial disasters.
Unit 12	**Basic Probability Concept and Statistics:** regression and time series analysis, and various quantitative techniques useful in risk management such as: Monte Carlo methods, Volatility forecasting models, Value-at-Risk estimation
Unit 13	**Valuation and Risk Models:** Basic bond valuation and bond hedging, Valuation using binomial trees, An understanding of the Black-Scholes-Merton model, Value-at-Risk (VaR), Expected and unexpected loss estimation, Stress testing.
Unit 14	**Foundation of Risk Management:** Management techniques, Fixed-income interest rate sensitivities, Volatility exposures, Value-at-Risk (VaR) and back testing VaR, Expected shortfall (ES), Correlations and copulas, Parametric and non-parametric estimation methods.

Unit 15	**Operational and Integrated Risk Management:** Measuring Operational Risks, Economic Capital Allocation and Enterprise Risk Management, Critical Issues Related to Liquidity Risk Management.

Reference Books:

- R M Shrivastava., Dr Divya Nigam, (2019). Management of Indian Financial Institutions. 8th edition, Publisher: Himalaya Publications.

- MacDonald, Scott S., and Timothy W. Koch. Management of Banking. 8th ed., Cengage Learning, 2014.
- Shrivastava, R. M., and Divya Nigam. Management of Indian Financial Institutions. 9th ed., Himalaya Publishing House, 2021.
- John C. Hull. Risk Management and Financial Institutions. 6th ed., Pearson, 2023.
- Indian Institute of Banking and Finance. General Bank Management. CAIIB Examination Series, Macmillan Publications, 2026 revised edition.
- Indian Institute of Banking and Finance. Risk Management. CAIIB Examination Series, Macmillan Publications, 2023 revised edition

COURSE CODE-DBFI306	**FINANCIAL STATEMENT ANALYSIS AND BUSINESS VALUATION**

Course Description:

This course provides a comprehensive understanding of Financial Statement Analysis and Business Valuation techniques essential for informed decision-making. It covers fundamental accounting principles and standards, followed by analytical tools such as ratio analysis, cash flow analysis, and vertical and horizontal analysis. The course further explores earnings quality, identification of financial red flags, and industry and competitor analysis to assess business performance. Advanced topics include various valuation approaches such as Discounted Cash Flow (DCF), relative valuation techniques, asset-based methods, and valuation of intangible assets. It also examines mergers, acquisitions, and real-world case studies to bridge theory with practice. The course emphasizes analytical thinking, interpretation of financial data, and application of valuation models in dynamic business environments.

Course Objectives:

On completion of this course, learners will be able to:

- To develop a strong foundation in financial statement analysis and accounting standards.
- To enhance analytical skills for evaluating financial performance and risk.
- To apply valuation techniques for business decision-making and investment analysis.

Course Contents:

Unit No.	Detailed Syllabus

Unit 1	**Introduction to Financial Statement Analysis:** Purpose, importance, and users of financial statements, Key components: balance sheet, income statement, and cash flow statement.
Unit 2	**Accounting Principles and Standards:** Generally Accepted Accounting Principles (GAAP) and International Financial Reporting Standards (IFRS), Impact of accounting choices on financial analysis
Unit 3	**Ratio Analysis and Interpretation:** Liquidity, profitability, solvency, and efficiency ratios, Comparative analysis and benchmarking
Unit 4	**Cash Flow Analysis:** Components and structure of cash flow statements, Free cash flow (FCF) analysis and forecasting.
Unit 5	**Earnings Quality and Red Flags:** Identifying earnings manipulation and aggressive accounting practices, Understanding non-recurring and extraordinary items
Unit 6	**Vertical and Horizontal Analysis:** Comparative financial statements analysis, Trend analysis and common-size financial statements.
Unit 7	**Industry and Competitor Analysis:** Tools for industry benchmarking, Competitive positioning and financial performance evaluation.
Unit 8	**Introduction to Business Valuation:** Concept and purpose of business valuation, Factors influencing valuation.
Unit 9	**Discounted Cash Flow (DCF) Valuation:** Principles of DCF analysis, Calculating present value and future cash flows
Unit 10	**Relative Valuation Techniques:** Price-to-earnings (P/E), price-to-book (P/B), and EV/EBITDA multiples, Selecting comparable companies
Unit 11	**Asset-Based Valuation Methods:** Book value and adjusted net asset methods, Liquidation and replacement cost approaches.
Unit 12	**Valuation of Intangible Assets:** Identifying and valuing intangibles like goodwill, patents, and brands, Impact on overall business valuation
Unit 13	**Mergers, Acquisitions, and Valuation:** Valuation for M&A transactions, Synergies and acquisition premiums
Unit 14	**Real-World Case Studies and Applications:** Valuation case studies from different industries, Ethical considerations and regulatory impacts in valuation.

Reference Books:

- Financial Statement Analysis, K. R. Subramanyam, John J. Wild, 12th Edition, 2024, McGraw-Hill.
- Financial Statement Analysis and Security Valuation, Stephen H. Penman, 6th Edition, 2023, McGraw-Hill Education.
- Investment Valuation, Aswath Damodaran, 3rd Edition (Updated Reprint 2023), Wiley.
- Applied Corporate Finance, Aswath Damodaran, 5th Edition, 2023, Wiley.

- Business Analysis and Valuation, Krishna G. Palepu, Paul M. Healy, Latest Edition, 2020 (widely used; reprints 2023–24), Cengage Learning.

COURSE CODE-DBFI307	PRINCIPLES AND PRACTICES OF INSURANCE

Course Description:
This course aims to provide a comprehensive understanding of the fundamental concepts, principles, and practices within the insurance industry in India. It covers the history and evolution of insurance and the concept of risk and its importance in insurance service. This course also explores the types of insurance (life and non-life) and examines the legal and regulatory framework for insurance industry. Further, the course examines the practical aspects of insurance operations, insurance customers and market, underwriting, claims handling etc. Learners will also acquire knowledge about the prevailing trends and practices in the insurance industry.

Course Objectives:

On completion of this course, learners will be able to:

- Provide an understanding of the economic and legal principles Insurance.
- Explain insurance operation, including functions of insurance, insurance
- markets, insurance regulations and the use of insurance as a tool to avoid losses and reduce risk.
- Acquaint themselves with major insurance products, such as life insurance, general and health Insurance.
- Develop an analytical approach to the application of knowledge and skills to solve problems related to insurance claims settlement and for valuation purpose.

Course Contents:

Unit No.	Detailed Syllabus
Unit 1	**Risk Management and Insurance:** Understanding of Risk Management, Different Types of Risks – Actual and Consequential Losses, Management of Risks – Loss Minimization Techniques – Basics, Concept of Insurance, Primary and Secondary functions of Insurance
Unit 2	**Evolution and History of Insurance:** Introduction and history of Insurance, Growth and development of Insurance in India, Concept of Pooling in Insurance, Different Classes of Insurance, Importance of Insurance, Unexpected Eventualities

Unit 3	**Insurance Terms:** Life and Non- Life – Specific Terms in Insurance: Life and Non-Life – Usage of Insurance Terms
Unit 4	**Insurance Business:** Management of Risk by Insurers – Fixing of Premiums – Reinsurance and its Importance for Insurers – Role of Insurance in Economic Development and Social Security – Contribution of Insurance to the Society
Unit 5	**Insurance Contract:** Understanding Insurance Contract, Essential Elements of Insurance contract and explanation of various terms associated with the contract
Unit 6	**Principles Of Insurance:** Principle of Insurable Interest, Principle of Indemnity, Principle of Subrogation, Principle of Contribution, Relevant Information Disclosure, Principle of utmost Good Faith, Relevance of Proximate Cause
Unit 7	**Insurance Customers:** Understanding Insurance Customers, understanding different customer needs and their mindsets, understanding customer behaviour at purchase point and customer behaviour when claim occurs.
Unit 8	**Insurance Market:** Constituents of Insurance Market, Operations of Insurance Companies, Operations of Intermediaries, Specialist Insurance Companies
Unit 9	**Insurance Laws and Regulation:** The Insurance Act, 1938 -Its features, Process of registration of Insurance companies, Duties and responsibilities of Insurer, Power & function of the Controller of Insurance, Rules regarding Agency, The insurance Act 1950, Life Insurance Act, 1956, General Insurance Act, 1972, Consumer Protection Act and Insurance Ombudsman.
Unit 10	**Insurance Regulatory Development Authority of India:** Introduction, Mission, Objectives of IRDA, Duties and Responsibilities of IRDA, Regulatory Framework of IRDA
Unit 11	**Insurance Forms**: Proposal Forms, Cover Notes, Certificate of Insurance, Policy Forms, Endorsements, Interpretation of Policies, Co-insurance, Renewal Notice.
Unit 12	**Life Insurance Products:** Risk of Dying Early, Risk of Living too Long, Products offered – Term Plans – Pure Endowment Plans – Combinations of Plans – Traditional Products – Linked Policies – Features of Annuities and Group Policies.
Unit 13	**General Insurance Products:** Risks faced by Owner of Assets – Exposure to Perils – Features of Products Covering Fire and Allied Perils – Products covering Marine and Transit Risks – Products covering Financial Losses due to Accidents – Products covering Financial Losses due to Hospitalization – Products Covering Miscellaneous Risks
Unit 14	**Premium Payment, Lapse and Renewal:** Premium, Surrender Values, Non-Forfeiture Options, Revival; Assignment Nomination Loans – Surrenders – Foreclosure: Assignment, Nomination, Loan and Surrenders, Foreclosure
Unit 15	**Policy Claims:** Methods of maturity claims and death claims, survival benefits, Accident benefit claim options, settlement options, valuation and surplus.

Reference Books:

- Risk Management and Insurance, Scott E. Harrington, Gregory R. Niehaus, 3rd Edition (Reprint 2023) McGraw-Hill Education.

- Principles of Risk Management and Insurance, George E. Rejda, Michael McNamara, 14th Edition, 2021 (Latest widely used; reprints 2023–24), Pearson
- Life Insurance, Indian Institute of Banking & Finance, 2023, Macmillan India.
- Principles and Practice of Insurance, G. S. Panda, 2022, Kalyani Publishers.

COURSE CODE-DBFI308	FINANCIAL SERVICES

Course Description: This course provides an in-depth understanding of the dynamic and evolving landscape of financial services in India. It covers a broad range of topics including mutual funds, insurance services, public issue management, underwriting, securitization, portfolio management, consumer finance, venture capital, credit rating, merchant and investment banking, leasing, hire purchase, factoring, and forfeiting. Emphasis is placed on the regulatory frameworks that govern these services, industry practices, and recent developments. By combining theoretical insights with practical perspectives, the course prepares students for careers in finance, banking, investment, and insurance sectors.

Course Objectives:

On completion of this course, learners will be able to:

- To introduce students to the concepts, functions, and significance of financial services in economic development.
- To provide a comprehensive understanding of various financial services like mutual funds, insurance, venture capital, and securitization.
- To equip students with knowledge of the regulatory frameworks governing financial services, including SEBI, IRDAI, and AMFI regulations.
- To explain the processes involved in public issue management, underwriting, investment banking, and portfolio management.
- To develop an understanding of emerging financial mechanisms like factoring, forfeiting, leasing, and hire purchase.
- To enable students to critically assess risk management tools like credit rating and securitization.
- To prepare students for professional roles in financial services firms, merchant banks, insurance companies, and venture capital organizations.

Course Contents:

Unit No.	Detailed Syllabus
Unit 1	**Financial Services:** Concept, Objectives, Growth of financial services in India, Problems, Regulatory Framework.
Unit 2	**Mutual Funds:** Concept, Process, Organization, Advantages, Products/features, Regulation of mutual fund, Association of Mutual Fund of India.

Unit 3	**Insurance Services:** Introduction to insurance Services, Principles of Insurance, Re-insurance, Life Insurance, General Insurance, Regulation of Insurance- Insurance Regulation Authority of India.
Unit 4	**Public Issue Management:** Introduction, Activities Involved in public issue management, SEBI guidelines, Issue Manager- role, Public Issue proposal.
Unit 5	**Underwriting of Securities:** Concept, Benefits of Underwriting, SEBI Guidelines.
Unit 6	**Securitization:** Concept, Need of Securitization, Features, Securitization process, Limitations.
Unit 7	**Portfolio Management Services:** Concept, Function, Strategies
Unit 8	**Consumer Finance:** Concept, Types of Consumer Finance, Demand for Consumer, Finance- Factors.
Unit 9	**Venture Capital:** Concept & Rational, Methods of Evaluation, Stages of Venture Capital Financing.
Unit 10	**Credit Rating:** Concept, Credit Rating Process, Advantages of Credit Rating, Issues related with Credit Rating
Unit 11	**Merchant Banks:** Concept, Function, Code of Conduct, Regulatory Framework.
Unit 12	**Investment Banking:** Introducing Investment Banking, Purpose of Investment Banking
Unit 13	**Leasing:** Concept, Features of Leasing, Types of Leasing, Process, Advantages/disadvantages of Leasing.
Unit 14	**Hire Purchase:** Concept, Rights of Hirer, Leasing vs Hire Purchase.
Unit 15	**Factoring & Forfeiting:** Concept, Mechanism of Factoring, Types of Factoring, Factoring vs Forfeiting.

Reference Books:

- Kothari Rajesh, Financial Services in India, SAGE Publishing, Latest Edition
- E. Gordon & K. Natrajan, Financial Markets and Services, JBA, 10th Edition, 2016
- M Y Khan, Financial Services, 5th Edition, Tata McGraw Hill, Latest Edition
- Pathak, The Indian Financial System, , Pearson Education, Latest Edition

Digital Marketing:

COURSE CODE: DDIM301	**INTRODUCTION TO DIGITAL MARKETING**

Course Description:

This course introduces learners to the dynamic world of digital marketing, focusing on the core strategies, tools, and techniques used to engage online audiences. It emphasizes the use of data-driven insights to optimize digital campaigns and foster customer engagement. Learners will gain practical skills in areas such as content marketing, social media, SEO, and web analytics, as well as an understanding of ethical practices in the digital space.

Course Objectives:
On completion of this course, learners will be able to:

- Understand the principles and scope of digital marketing.
- Gain proficiency in SEO, social media, PPC, and email marketing techniques.
- Develop and implement content marketing strategies.
- Analyze and measure the performance of digital campaigns using analytical tools.
- Apply ethical and legal considerations in digital marketing practices.

Course Contents:

Unit No.	Detailed Syllabus
Unit 1	**Introduction to Digital Marketing:** Definition, evolution, and scope. Benefits and challenges of digital marketing. Digital vs. traditional marketing.
Unit 2	**Digital Marketing Channels:** Overview of key digital channels: websites, search engines, social media, email, and mobile apps.
Unit 3	**Content Marketing:** Importance of content in digital marketing. Content types: blogs, videos, infographics, and podcasts. Creating and curating content.
Unit 4	**Search Engine Optimization (SEO):** SEO fundamentals: on-page, off-page, technical SEO. Tools for keyword research, link building, and performance analysis.
Unit 5	**Pay-Per-Click (PPC) Advertising:** Introduction to PPC, campaign setup, bidding strategies, and performance metrics. Overview of Google Ads and other PPC platforms.
Unit 6	**Social Media Marketing:** Social media platforms (Facebook, Instagram, LinkedIn, X). Creating and managing campaigns, audience targeting, and social media analytics.
Unit 7	**Email Marketing:** Building and managing mailing lists. Email automation and personalization. Writing effective email copy and optimizing for conversions.
Unit 8	**Affiliate Marketing:** Introduction to affiliate marketing, setting up affiliate programs, tracking performance, and managing partnerships.
Unit 9	Influencer Marketing: Role of influencers in digital marketing. Identifying and collaborating with influencers. Measuring the impact of influencer campaigns.
Unit 10	**Web Analytics:** Introduction to web analytics tools like Google Analytics. Key metrics: bounce rate, conversion rate, user engagement, and traffic sources.
Unit 11	**Digital Marketing Strategy and Planning:** Developing a digital marketing plan. Setting objectives, budgeting, targeting, and campaign execution.
Unit 12	**Mobile Marketing:** Importance of mobile marketing. Mobile-friendly content, SMS campaigns, app marketing, and location-based targeting.
Unit 13	**Ethics and Legal Issues in Digital Marketing:** Privacy laws (GDPR), ethical considerations, data protection, and best practices for compliance.

Unit 14	**Emerging Trends and Technologies in Digital Marketing:** Artificial intelligence (AI), voice search, virtual reality (VR), chatbots, and their impact on digital marketing strategies.

Reference Books:

- Chaffey, D., & Ellis-Chadwick, F. (2022). *Digital Marketing* (8th ed.). Pearson.
- Hanlon, A., & Tuten, T. L. (Eds.). (2022). *The SAGE Handbook of Digital Marketing*. SAGE Publications.
- Hanlon, A., & Tuten, T. L. (2022). *The SAGE Handbook of Digital & Social Media Marketing*. SAGE Publications.
- Charlesworth, A. (2022). *Digital Marketing: A Practical Approach* (4th ed.). Routledge.
- Kotler, P., Kartajaya, H., & Setiawan, I. (2021). *Marketing 5.0: Technology for Humanity*. Wiley.

COURSE CODE: DDIM302	SOCIAL MEDIA MARKETING

Course Description:
This Social Media Marketing course offers a comprehensive understanding of various social media platforms and how to effectively leverage them for business growth. Learners will explore the evolution of social media, its significance in marketing, and the ethical considerations that accompany its use. The course provides detailed insights into creating effective social media marketing plans, measuring performance, and understanding platform-specific strategies. Topics include Facebook, Pinterest, X (formerly Twitter), LinkedIn, Quora, YouTube, and Instagram marketing, focusing on content creation, audience targeting, engagement strategies, advertising, and analytics.

Course Objectives:
On completion of this course, learners will be able to:

- To be equipped with the knowledge, skills, and abilities to understand key terms such as social media marketing, influencer marketing, and content marketing.
- To gain knowledge about components of a social media marketing plan.
- To be aware of different types of social media platforms and their features.
- To create engaging content for various social media platforms such as Instagram reels, YouTube videos, and LinkedIn articles.
- To analyse social media analytics to determine the success of campaigns.

Course Contents:

Unit No.	Detailed Syllabus
Unit 1	**Introduction to Social Media:** Intro to social media, How social media developed, social media marketing & its significance, Necessity of social media marketing, social media, and contemporary trends: content marketing, influencer marketing, blog marketing, and ethical aspects of social media.

Unit 2	**Social Media Marketing Plan and Performance Measurement:** SMM Plan: Setting Goals, Determining Strategies, Identifying Target Market, Selecting Tools, Selecting Platforms, Implementation: Measuring Effectiveness: Conversion rate, amplification rate, and applause rate: on page and on post level.
Unit 3	**Facebook Marketing:** Facebook for Business, Facebook Insight, Different types of ad formats, setting up a Facebook advertising account, Facebook audience and types, designing Facebook advertising campaigns, Facebook avatars, apps, live, and hashtags.
Unit 4	**Pinterest Marketing:** Pinterest meaning, Types of Pinterest Accounts (Personal, Business), What is a pin, pinners? What is a board? Importance of Pinterest Marketing, how to use Pinterest for business growth, Pinterest Analytics.
Unit 5	**Pinterest SEO & Marketing Strategy:** Pinterest for Creators, Pinterest for Small Businesses, why is Pinterest marketing valuable? Organically grow Pinterest followers, Pinterest Marketing Strategy, Pinterest Marketing Tools, Add hashtags to Pinterest images.
Unit 6	**X (formerly Twitter) Marketing:** X meaning, creating an X account, increasing X followers, X Marketing, X posts, video, photos, hashtags, linking, retweets, latest trends, create an ad on X?
Unit 7	**X Analytics:** X Analytics and 3rd party tools, Benefits of Analytics, how to view analytics, X Notes, X direct message, X audio and video calls, Personalized X Ads, X Analytics.
Unit 8	**LinkedIn Marketing I:** LinkedIn Meaning and its Features, Importance of LinkedIn Marketing, creating a LinkedIn Profile, Importance of LinkedIn Profile, Growing the LinkedIn Network, Difference Between LinkedIn and Other Forms of social media.
Unit 9	**LinkedIn Marketing II:** Organic and paid, how to do LinkedIn marketing, what is a LinkedIn Premium Account? its benefits for business, benefits of LinkedIn marketing, LinkedIn marketing tools.
Unit 10	**LinkedIn Marketing Strategy:** LinkedIn Campaign Manager, using hashtags, LinkedIn product pages, showcase pages, company pages, and post scheduling, LinkedIn Analytics, Utilise LinkedIn articles and long-form content; start a LinkedIn newsletter. Target the right audience with paid campaigns. Track Your Success on LinkedIn, LinkedIn Ads (learning, talent, posting a job, finding a new client, groups, services marketplace).
Unit 11	**Quora Marketing:** Quora, create a Quora profile, use Quora for marketing, Advantages of Quora Marketing, How to Find Your Audience on Quora, Quora Differ from Other Social Media Platforms, Different Ways to Promote on the Quora Platform, Create a Quora Marketing Strategy, Tips for using Quora, Answer Quora Questions: Best Practices for Quora Marketing
Unit 12	**YouTube Marketing and Analytics:** Introduction, YouTube marketing meaning, creating a YouTube Channel, how to upload a video to YouTube, increasing views and subscribers, YouTube Ads, Types of YouTube Ads, YouTube Shorts, What Is YouTube Premium, What Is YouTube Studio? Uses of Studio, YouTube Seo, Call-to-action, Benefits of YouTube Video Marketing, Live Streaming.
Unit 13	**YouTube Marketing Tools:** YouTube Analytics, Attract More Subscribers, Engage With Your Audience, Add Subtitles and Closed Captions to Your Videos, Most Popular Types of YouTube Creators In-Trend.
Unit 14	**Instagram Marketing:** Instagram, Instagram Marketing Instagram marketing, Instagram Live, Like, Comment, and Reply on Instagram.

Unit 15	**Instagram and Insights for Business:** Instagram insights, Importance of Instagram insights, Advertising on Instagram (Paid), Instagram Reels, Instagram Stories, Use of hashtags (#), Instagram Poll, Professional Dashboard.

Reference Books:

- Rishi, B., Tuten, T.L., (2020) Social Media Marketing, 3ed., Sage Textbook.
- Parker, J., Roberts, M. L., Zahay, D., Barker, D. I., Barker, M. (2022). Social Media Marketing: A Strategic Approach. United States: Cengage Learning.
- Johnson, S. (2020). Social Media Marketing: Secret Strategies for Advertising Your Business and Personal Brand on Instagram, YouTube, Twitter, And Facebook. A Guide to being an Influencer of Millions. Italy: Andrea Astemio.

COURSE CODE: DDIM303	**SEARCH ENGINE MARKETING AND SEO**

Course Description:

This course provides a comprehensive understanding of Search Engine Marketing (SEM) and Search Engine Optimization (SEO). It covers the strategies and techniques businesses use to increase visibility on search engines. Learners will explore keyword research, paid search campaigns, content optimization, and analytics tools to drive traffic and improve online performance. The course also highlights ethical practices and emerging trends in SEM and SEO.

Course Objectives:

On completion of this course, learners will be able to:

- Understand the principles of SEM and SEO.
- Develop proficiency in keyword research, on-page and off-page optimization.
- Create and manage paid search campaigns using tools like Google Ads.
- Analyze and interpret website performance using analytics.
- Apply ethical practices and stay updated with trends in search engine marketing.

Course Contents:

Unit No.	Detailed Syllabus
Unit 1	**Introduction to Search Engine Marketing and SEO:** Definition, importance, and scope of SEM and SEO. Differences between SEM, SEO, and traditional marketing.
Unit 2	**Search Engine Basics:** How search engines work: crawling, indexing, and ranking. Overview of major search engines (Google, Bing).
Unit 3	**Keyword Research and Analysis:** Understanding user intent, tools for keyword research (Google Keyword Planner, SEMrush), and selecting target keywords.
Unit 4	**On-Page SEO: Optimizing web pages:** title tags, meta descriptions, headers, URL structure, and image optimization.

Unit 5	**Off-Page SEO:** Link building strategies, backlinks, social signals, and brand mentions. Importance of domain authority and trust.
Unit 6	**Technical SEO:** Site architecture, sitemaps, robots.txt, page speed optimization, mobile-friendliness, and structured data (schema).
Unit 7	**Local SEO:** Optimizing for local searches, Google My Business, citations, reviews, and local link building.
Unit 8	**Introduction to Pay-Per-Click (PPC) Advertising:** Basics of PPC, types of ads, Google Ads setup, and bidding strategies.
Unit 9	**Google Ads Campaign Management:** Creating and managing campaigns, ad groups, keywords, ad copy, and extensions.
Unit 10	**Campaign Optimization and Performance Metrics:** Tracking and improving campaigns: CTR, Quality Score, conversion rate, and A/B testing.
Unit 11	**Analytics and Reporting:** Introduction to Google Analytics, setting up goals, tracking user behavior, and creating reports.
Unit 12	**SEM and SEO Tools:** Overview of tools like SEMrush, Ahrefs, Moz, Google Search Console, and their applications.
Unit 13	**Ethics and Legal Considerations in SEM and SEO:** Black-hat vs. white-hat SEO, ethical link building, ad policies, and data privacy regulations.
Unit 14	**Emerging Trends in SEM and SEO:** Voice search, artificial intelligence, machine learning in search, visual search, and future predictions.

Reference Books:

- Clarke, Adam. SEO 2023: Learn Search Engine Optimization with Smart Internet Marketing Strategies, Independently Published, 2023.
- Goodman, Brad. Search Engine Marketing for Beginners: A Guide to Understanding and Implementing SEM, Independently Published, 2021.
- Chaffey, D., & Ellis-Chadwick, F. (2022). Digital Marketing (8th ed.). Pearson.
- Charlesworth, A. (2022). Digital Marketing: A Practical Approach (4th ed.). Routledge.
- Stokes, R. (2020). eMarketing: The Essential Guide to Marketing in a Digital World (6th ed.). McGraw-Hill.

COURSE CODE: DDIM304	ETHICS IN DIGITAL MARKETING

Course Description:
This course explores the ethical challenges and considerations in digital marketing, emphasizing the importance of responsible marketing practices. Learners will gain an understanding of key ethical issues, including data privacy, consumer protection, transparency, and regulatory compliance. The course also addresses the implications of emerging technologies on ethical practices in digital marketing.

Course Objectives:
On completion of this course, learners will be able to:

- Understand the ethical principles relevant to digital marketing.
- Analyse the ethical challenges associated with data collection, privacy, and online advertising.
- Apply ethical decision-making frameworks to digital marketing strategies.
- Comply with legal and regulatory standards in digital marketing practices.
- Evaluate the ethical implications of emerging digital marketing technologies.

Course Contents:

Unit No.	Detailed Syllabus
Unit 1	**Introduction to Ethics in Digital Marketing:** Definition of ethics, importance in digital marketing, and common ethical issues.
Unit 2	**Digital Advertising and Ethical Considerations:** Transparency in advertising, ethical issues in targeted ads, and deceptive marketing practices.
Unit 3	**Data Privacy and Security:** Importance of data privacy, handling customer data responsibly, and compliance with data protection laws (GDPR, CCPA).
Unit 4	**Consumer Protection in Digital Marketing:** Understanding consumer rights, ethical considerations in customer engagement, and resolving disputes.
Unit 5	**Social Media Ethics:** Ethical use of social media platforms, managing online communities, and avoiding misinformation.
Unit 6	**Influencer Marketing and Ethical Challenges**: Disclosure of sponsorships, transparency, and ethical collaboration with influencers.
Unit 7	**Content Ethics and Copyright Issues:** Creating ethical content, avoiding plagiarism, and respecting intellectual property rights.
Unit 8	**Email Marketing Ethics:** Permission-based marketing, opt-in/opt-out policies, and ethical email practices.
Unit 9	**SEO and SEM Ethics:** Ethical SEO practices, avoiding black-hat techniques, and fair competition in search engine marketing.
Unit 10	**Ethical Issues in AI and Automation:** Use of AI in digital marketing, ethical concerns in automation, and maintaining human oversight.
Unit 11	**Corporate Social Responsibility (CSR) in Digital Marketing:** Integrating CSR into digital strategies, promoting sustainability, and building ethical brands.

Unit 12	**Ethical Decision-Making Frameworks:** Models and frameworks for ethical decision-making in digital marketing scenarios.
Unit 13	**Legal and Regulatory Compliance:** Overview of digital marketing regulations, advertising standards, and legal considerations across regions.
Unit 14	**Emerging Ethical Issues and Future Trends:** Ethical implications of emerging technologies such as blockchain, virtual reality, and voice search in digital marketing.

References Books:

- Eagle, L., Dahl, S., De Pelsmacker, P., & Taylor, C. R. (Eds.). (2020). The SAGE Handbook of Marketing Ethics. SAGE Publications.
- Hanlon, A., & Tuten, T. L. (2023). The SAGE Handbook of Digital Marketing. SAGE Publications.
- Kaufman, I., Horton, C., & Soltanifar, M. (2024). Digital Marketing: Integrating Strategy, Sustainability and Purpose. Routledge.
- Kotler, P., Kartajaya, H., & Setiawan, I. (2021). Marketing 5.0: Technology for Humanity. Wiley.
- Charlesworth, A. (2022). Digital Marketing: A Practical Approach (4th ed.). Routledge.

Retail Management

COURSE CODE: DRMM305	**SALES AND DISTRIBUTION MANAGEMENT**

Course Description

This course offers a comprehensive examination of sales and distribution management, covering both foundational concepts and advanced practices. The course delves into personal selling processes, including preparation, the buying decision process, and sales forecasting and budgeting. Additionally, the course addresses distribution management, including channel design, management, and performance measurement, with a focus on e-commerce and logistics.

Course Objectives

On completion of this course, learners will be able to:

1. To define key terms and concepts related to sales management and distribution management.
2. To explain the roles and skills of modern sales managers and the importance of effective sales management.
3. To implement sales forecasting techniques and budget development methods to support sales planning.
4. To analyze sales data to evaluate forecast accuracy and the effectiveness of sales strategies and tactics.
5. To develop a comprehensive sales management plan, including strategies for motivating and compensating the sales force and managing sales territories.
6. To integrate sales and distribution management concepts to create a cohesive approach to market penetration and customer engagement.

Course Contents:

Unit No.	Detailed Syllabus

Unit 1	**Introduction to Sales Management:** Introduction, Evolution of Sales Management, Nature and Importance of Sales Management, Roles and Skills of Modern Sales Managers, Careers in Sales Management.
Unit 2	**Sales Management Positions:** Sales objectives, Strategies and Tactics, Linking Sales and Distribution Management.
Unit 3	**Introduction to Personal Selling:** Preparation and Process: Buying decision process, Approaches to Personal Selling, buying situations, Sales Planning, Managing the Sales Force
Unit 4	**Sales Forecasting and Budgeting:** Sales planning, developing sales forecast, Forecast accuracy.
Unit 5	**Sales Budgets:** Management of Sales Territories: Defining sales territories, Procedure of designing sales territories, assigning salespersons to territories, Managing territorial coverage.
Unit 6	**Sales Quotas:** Organizing and Staffing the Sales Force: Sales force training, Concept of sales organization, Size of the sales force, Staffing the sales force, Sales Call Script, Objection handling and Sales Closing Techniques.
Unit 7	**Negotiation, Motivating, and Compensating Sales Personnel:** Motivating and Compensating Sales Personal, Selection and Placement of Sales Personnel.
Unit 8	**Sales Budgeting:** Approaches and Techniques, Development of Sales Force and Sales Organization.
Unit 9	**Evaluation of Sales Personnel:** Sales control and cost analysis, Sales Ethics.
Unit 10	**Introduction to Distribution Management:** Distribution network management, Evolution of Distribution Channels, Retailing, wholesaling, Measuring Wholesale Performance, Franchising.
Unit 11	**Channel Design and Distribution:** Channel Management, Channel Information System, Designing, Customer-oriented Logistics Management, E-commerce and Distribution Channel Management.
Unit 12	**Logistics and Supply Chain Management SCM:** Performance Measures, Information System, Assessing Performance of Marketing Channels, Managing Channel Member Behaviour.
Unit 13	**Channel Management Strategies:** Managing the International Channels of Distribution, Designing and implementing a winning go-to-market strategy-channel stewardship.
Unit 14	**Advanced Sales and Distribution Management:** Manage conflicts, Balancing customers' needs with distribution channel's capabilities, Route-to-market Optimization, New product distribution strategy, Leveraging data and technology in sales and distribution management. Recent Trends in Supply Chain Management: Introduction, New Developments in Supply Chain Management.

Reference books:

- Jobber, D., Lancaster, G., & Le Meunier-FitzHugh, K. (2024). *Selling and Sales Management* (12th ed.). Pearson.
- Still, R. R., Cundiff, E. W., Govoni, N. A. P., & Puri, S. (2024). *Sales and Distribution Management: Decisions, Strategies, and Cases*. Pearson.
- Hair, J. F., Mehta, R., Babin, B., Kaushik, A., & Rahman, Z. (2024). *Sales and Distribution Management* (2nd ed.). Wiley.
- Ingram, T. N., LaForge, R. W., Avila, R. A., Schwepker Jr., C. H., & Williams, M. R. (2024). *Sales Management: Analysis and Decision Making*. Routledge.

- Venugopal, P. (2020). *Sales and Distribution Management: An Integrative Approach*. SAGE Publications.

COURSE CODE- DRMM 306	**RETAIL CUSTOMER RELATIONSHIP MANAGEMENT**

Course Introduction: This course focuses on the strategies and practices essential for building and maintaining strong customer relationships in the retail sector. Students will explore customer-centric approaches to retail management, including loyalty programs, personalized marketing, customer service excellence, and the role of digital technologies in enhancing customer engagement. The course emphasizes the importance of understanding customer behavior, expectations, and satisfaction to drive sales and retention. Through case studies and hands-on applications, learners will develop skills to create lasting customer connections that contribute to long-term retail success.

Course Objectives:

On completion of this course, learners will be able to:

- Understand and describe a customer relationship management application,
- Understand how it has been successfully implemented in various organizations and what does it take to ensure a successful implementation
- Develop understanding about customer relationship management concepts and frameworks, and how these are applied to form relationships with customers and other internal and external stakeholders.
- Develop skills to analyse and synthesise information and issues, related to customer relationship management, from retail perspectives.

Course Contents:

Unit No.	Detailed Syllabus
Unit 1	**Global Retail Environment:** Retail operations globally, Retail houses at global level, Challenges and directions ahead
Unit 2	**Leadership and Organizational Behaviour:** Global leaders in retail, managing a global chain, Retail institutions by ownership
Unit 3	**Design and Management of Information Systems:** Information gathering and processing in retail, Design of brick and mortar and click and mortar retail stores
Unit 4	**Category Management:** Need, Significance, and importance of category management
Unit 5	**Digital and Social Media Marketing:** Web and non-store-based retail outlets, Importance and significance
Unit 6	**Consumer Behavior:** Definition, Models of Consumer behaviour, Importance of behavioural studies, Importance of the study of consumer Behavior; Determinants of Consumer Behaviour; Consumer and marketing strategy; The new age consumer.
Unit 7	**Integrated Marketing Communication:** Definition, Need, Importance and IMC Case studies
Unit 8	**Retail Franchising:** Franchising Need and Importance, channel relationships in franchising

Unit 9	**Concept of Brand:** Need, Importance, Brand Equity and building brand loyalty
Unit 10	**Growing and Sustaining Brand Equity:** Brand Equity measures, Importance and Significance
Unit 11	**Branding in Retail Business:** Local and Global brands and importance the retailer as a Brand - The role of own label - Retailers perspective towards Manufactures and their Brands -Emerging trends in Branding of Retail Business.
Unit 12	**Services Marketing:** Concept of customer service and its significance in retail, Framework for understanding gaps in customer service, concept of CRM and service blueprinting
Unit 13	**Services Product Management:** Role of Product management in retail services
Unit 14	**Services Distribution Strategies:** Concept of distribution management, Marketing channel systems – Concepts, participants, environment, behavioural process – Developing the marketing channel-Strategy, design, channel platform- challenges, Integration of distribution channels
Unit 15	**Services Quality Management:** Distinctive characteristics service operations-Service Bench Marking-Service strategy - Designing the service enterprise – Service Quality-Service facility location-Managing service operations-Service-Supply relationships vehicle routing.

Reference Books:

- Berman, B., Evans, J. R., & Chatterjee, P. (2021). *Retail management: A strategic approach* (13th ed.). Pearson Education.
- Keller, K. L. (2024). *Strategic brand management: Building, measuring, and managing brand equity* (5th ed.). Pearson Education.
- Schiffman, L. G., & Wisenblit, J. (2022). *Consumer behavior* (13th ed.). Pearson Education.
- Zeithaml, V. A., Bitner, M. J., & Gremler, D. D. (2022). *Services marketing: Integrating customer focus across the firm* (8th ed.). McGraw Hill Education.
- Levy, M., Grewal, D., & Weitz, B. A. (2024). *Retailing management* (11th ed.). McGraw Hill Education.

COURSE CODE- DRMM307	**RETAIL MARKETING**

Course Description: This course on *Retail Marketing* provides a comprehensive understanding of the principles and strategies essential for success in the dynamic retail sector. Students will explore key concepts such as consumer behavior, retail market segmentation, and the development of effective marketing mixes. The course covers topics like store layout, merchandising, pricing strategies, branding, and the role of digital marketing in retail. Through case studies and practical examples, learners will gain insights into retail operations, customer relationship management, and competitive positioning. Ideal for future retail professionals, this course equips participants with the skills to create compelling retail experiences and drive business growth.

Course Objectives:
On completion of this course, learners will be able to:

- To define retailing and understand the contemporary retail business scenario
- To understand the ways that retailers use marketing tools and techniques to interact with their customers
- To understand the role of Information Systems in the changing retail industry

Course Contents:

Unit No.	Detailed Syllabus
Unit 1	**Introduction to Retailing:** Introduction, Meaning of Retailing, Economic Significance of Retailing, Retailing Management Decision Process, Product Retailing vs. Service Retailing, Types of Retailers, Retailing Environment, Indian vs. Global Scenario.
Unit 2	**Retail Marketing Environment:** Introduction, Understanding the Environment, Elements in a Retail Marketing Environment, Environmental Issues.
Unit 3	**The Retail Marketing Segmentation:** Introduction, Importance of Market, Segmentation in Retail, Targeted Marketing Efforts, Criteria for Effective Segmentation, Dimensions of Segmentation, Positioning Decisions, Limitations of Market Segmentation.
Unit 4	**Retail Consumer Behaviour:** General characteristics of consumers, Buying Behaviour – Types of Buying, Factors influencing CB, Retail Buying Process
Unit 5	**Retail Marketing Strategies:** Introduction, Target Market and Retail Format, Strategy at different levels of Business, Building a Sustainable Competitive Advantage, the Strategic Retail Planning Process, Retail Models, Retail "EST" model.
Unit 6	**Store Location and Layout:** Introduction, Types of Retail Stores Location, Factors Affecting Retail Location Decisions, Country/Region Analysis, Trade Area Analysis, Site Evaluation, Site Selection, Location Based Retail Strategies, Types of Store Layout.
Unit 7	**Merchandise Management:** Introduction, Understanding Merchandising Management, Activities of a Merchandiser, Retail Merchandising Management Process.
Unit 8	**Private Branding in Retail:** Introduction, Difference between a Store/Private, Brand and a National Brand, Growth Drivers of Private Label, Global Scenario of Private Labels, Indian Market Scenario, Advantages of Private Label, Disadvantages of Private Label.
Unit 9	**Integrated Marketing Communication in Retail**: Introduction, Understanding Integrated Marketing Communication, Elements of Communication Process, Communication Plan - Integrated marketing process, Tools of IMC, Upcoming tools of IMC, Factors influencing the Increased use of sales promotion.
Unit 10	**Retail Pricing:** Introduction, Establishing Pricing Policies, Factors Influencing Pricing, Pricing Strategies, Psychological pricing, Mark-up and Mark-down Pricing
Unit 11	**Customer Relationship Management in Retailing:** Introduction, Benefits of Relationship Marketing, Management of Relationship, Principles of CRM, Customer Relationship Management Strategies, Components of CRM, Customer Service in Retailing, CRM and Loyalty Program.
Unit 12	**International Retailing:** Introduction, Stages in Retail Global Evolution, Reasons for Going Global, Benefits of Going Global, Other Opportunities and Benefits of Going Global, Market Entry Methods.

Unit 13	**E-Tailing:** Introduction: E-tailing, Role of Technology in Satisfying Market Demand, Technology in Retail Marketing Decisions, Structure and Developments in E-tailing, Factors Influences the Growth of E-Tailing, Advantages and Disadvantages of E-Tailing, Future of Electronic Retailing.
Unit 14	**Rural Retailing:** Introduction, an Overview of the Indian Rural Market, Role of Rural retailing in India, Challenges in Indian Rural Market, Periodic Markets (Shanties/Haats/Jathras), Rural retail Players in India, Rural Retail Strategies, Future of Rural retailing.

Reference Books:

- Berman, B., Evans, J. R., & Chatterjee, P. (2021). *Retail management: A strategic approach* (14th ed.). Pearson Education.
- Levy, M., Grewal, D., & Weitz, B. A. (2024). *Retailing management* (11th ed.). McGraw Hill Education.
- Pradhan, S. (2022). *Retail management* (6th ed.). McGraw Hill Education India.
- Zeithaml, V. A., Bitner, M. J., & Gremler, D. D. (2022). *Services marketing: Integrating customer focus across the firm* (8th ed.). McGraw Hill Education.
- Schiffman, L. G., & Wisenblit, J. (2022). *Consumer behavior* (13th ed.). Pearson Education.

COURSE CODE: DRMM308	e-RETAILING

Course Description: This course provides a comprehensive overview of e-retailing, delving into its significance, evolution, and key aspects that differentiate it from traditional retailing. It covers the latest trends in e-retailing, its market potential, and the different business models that are central to e-commerce today. Learners will learn how to design and operate e-stores, focusing on key elements such as website design, interactivity, and navigability. The course also explores the marketing strategies required for successful e-retailing, including the application of the marketing mix, supply chain management, promotional strategies, and branding on the web. The role of social media and emerging technologies such as AR/VR in shaping consumer behaviour and online experiences is examined, alongside key challenges in areas like security, payments, and legal frameworks. Finally, the course delves into customer relationship management, understanding e-consumers, and the importance of communication in e-tailing.

Course Objectives

On completion of this course, learners will be able to:

- To be equipped with knowledge about key terms and concepts related to e-retailing, such as e-tailing models, e-marketing, and customer relationship management.
- To gain knowledge about the transition from traditional retailing to e-retailing and how digital marketing strategies impact consumer behaviour and business operations.
- To apply the principles of e-retailing to design an effective e-store, focusing on web atmospherics, navigability, and interactivity.
- To compare various e-retailing business models such as B2C, B2B, C2C, and others.
- To Assess the potential challenges and solutions in communicating with e-consumers and managing online customer experiences.

Course Contents:

Unit No.	Detailed Syllabus
Unit 1	**Introduction to E-Retailing:** Meaning, features, importance, challenges and evolution of e-retailing, Transition from Traditional Marketing to e-Marketing, Difference between traditional retailing and e-retailing, Integration of e-retailing in an organization
Unit 2	**Latest Market trends on e-retailing:** Future potentialities for e-tailing, Demographics and Targeting, Adaptability and Closed – Loop Marketing, Brick & Mortar, Click & Mortar and pure E-tailing, Multi-channel E-tailing.
Unit 3	**E-tailing Models:** starting an e-store, models, Weighing the options, approaches to building an E-store, requirements of an effective E-store.
Unit 4	**Marketing strategies for e-stores:** Marketing mix in the age of E-tailing; the roles of cyber intermediaries in E-tailing; E-tailing and supply chain management system; Promotional strategies of E-retail business, Branding on the web, offline marketing, cross selling, referral services, permission marketing.
Unit 5	**Business Models for E-commerce:** The Birth of Portals – E-Business Models – Business-to Consumer (B2C) – Business-to-Business (B2B) – Consumer-to Consumer (C2C) – Consumer to-Business (C2B) – Brokerage Model – Value Chain Model – Advertising Model.

Unit 6	**E-marketing:** Traditional Marketing Vs.-Marketing – Impact of E-commerce on markets – Marketing issues in E-Marketing – Online Marketing – E-advertising – Internet Marketing Trends – E-Branding – Marketing Strategies.
Unit 7	**E-store design:** Navigability, interactivity and atmospherics, e-retailing models
Unit 8	**Social media and E-retailing**: Influencing consumer choices through social media, Creating and maintaining online relationships through Social Media Marketing, managing Online customer experience.
Unit 9	**Innovations in E-Tailing**: Role of AR/VR in enhancing online shopping experiences, Voice commerce and smart assistants, Sustainability in E-Tailing: Eco-friendly packaging and green logistics.
Unit 10	**Payment & security issues:** Online payment processing, internet payment gateways, internet security issues.
Unit 11	**Legal Framework for E-Commerce:** E-Commerce Legal Framework – Rights and Obligations in the World of E-commerce – Copyrights – Privacy – Domain name and Registration
Unit 12	**E-services:** Discussion on some popular business sectors for e-tailing (like books, music, education, financial and investment services etc).
Unit 13	**Understanding E-Consumers:** Definition of E-Consumer, Differences between traditional consumers and e-consumers, Characteristics of e-consumers, changing shopping habits in the digital age, Factors influencing e-consumer behaviour.
Unit 14	**Communicating with E-Consumers:** Information Search on the Web: Definition and Importance of Information Search, Role of the internet in simplifying access to information, Key Challenges and Solutions in E-Consumer Communication and Information Search.
Unit 15	**Customer Relation Management in E-tailing:** Building customer loyalty, CRM implementation, Customer service, gift reminder services, contests & promotions, online communities, loyalty programs, personalization

Reference Books:

- Laudon, K.C., & Traver, C.G. (2021). E-commerce: Business, Technology, Society, 16th ed., Pearson.
- Wright, L.T., & Sutherland, J. (2019). E-Retailing: The Complete Guide to Online Shopping, 2nd ed., Routledge.
- Berman, B., & Evans, J.R. (2021). Retail Management: A Strategic Approach, 13th ed., Pearson
- Kenneth C. Laudon & Carol Guercio Traver (2024), E-Commerce 2023–2024: Business, Technology and Society.

SEMESTER 4

Course Code- DMBA409	**INTERNATIONAL BUSINESS MANAGEMENT**

Course Description: This course provides a comprehensive understanding of the complexities and dynamics involved in conducting business in an international context. It covers key concepts and strategies needed to navigate global markets, including the political, economic, and cultural factors influencing international business operations. Students will explore international trade theories, global market entry strategies, international financial management, and the impact of globalization on businesses. The course also examines the role of multinational enterprises (MNEs) and provides insight into managing international teams, adapting to diverse cultural environments, and complying with international regulations.

Course Objectives:

On completion of this course, learners will be able to:

- To be equipped with the knowledge, skills, and abilities to understand the global economic, political, cultural and social environment within which firms operate
- To gain knowledge in international business environment, strategies and management
- To be aware of the global business environment and its impacts on businesses
- To apply the current business phenomenon and to evaluate the global business environment in terms of economic, social and legal aspects
- To analyze the principle of international business and strategies adopted by firms to expand globally

Unit No.	Detailed Syllabus
Unit 1	**Introduction to International Business:** Introduction, Elements of International Business, Globalization
Unit 2	**International Trade theories and their application:** Introduction, Reasons of Trading, Theories of International trade- mercantilism, Absolute advantage, Comparative advantage, Heckscher- Ohlin, Product life cycle theory and Porter's diamond model
Unit 3	**International Business Environment:** Introduction, Cultural Environment, Economic Environment, Political Environment, Demographic environment, Legal Environment
Unit 4	**Foreign Investments- Types and Motives**: Foreign investments, types of foreign investments, motives
Unit 5	**Regional Integration:** Introduction, Overview of Regional Integration, Types of Integration, Regional Trading Arrangements, India and Trade Agreements
Unit 6	**Global Trade Institutions:** Introduction, World trade organization (WTO), IMS, World Bank, EXIM Bank
Unit 7	**International Financial Management:** Introduction, Overview of International Financial Management, Components of International Financial Management, Scope of International Financial Management
Unit 8	**International Accounting Practices:** Introduction, International Accounting Standards, Accounting for International Business, International Regulatory Bodies, International Financial Reporting Standards
Unit 9	**International Marketing:** Introduction, scanning international markets, mode of entering into potential markets, Global Marketing Strategies, Branding for International Markets

Unit 10	**International Strategic Management:** Introduction, Strategic Management, Strategic Planning, Strategic Management Process
Unit 11	**International Human Resource Management:** Introduction, International Organizational Structures, Introduction to International Human Resource Management, Scope of International Human Resource Management
Unit 12	**International Human Resource Management**: Introduction, International Organizational Structures, Introduction to International Human Resource Management, Scope of International Human Resource Management
Unit 13	**Finance and International Trade:** Introduction, understanding payment mechanism, Documentation in International Trade, Financing Techniques, Export Promotion Schemes, Export and Import Finance
Unit 14	**Global Sourcing and Indian Industries structure:** Introduction, Concept, Reasons for global sourcing, advantages and disadvantages, Challenges for Indian Businesses

Reference Book:

- Hill, C. W. L., & Hult, G. T. M. (2023). *International business: Competing in the global marketplace* (13th ed.). McGraw-Hill Education
- Daniels, J. D., Radebaugh, L. H., & Sullivan, D. P. (2022). *International business: Environments and operations* (17th ed.). Pearson
- Cateora, P. R., Gilly, M. C., & Graham, J. L. (2021). *International marketing* (18th ed.). McGraw-Hill Education
- Madura, J., & Fox, R. (2020). *International financial management* (13th ed.). Cengage Learning
- Doupnik, T. S., & Perera, H. (2020). *International accounting* (5th ed.). McGraw-Hill Education

Finance

Course Code- DFIN405	**FINANCIAL MODELLING**

Course Description: This course on Financial Modelling provides a thorough exploration of the techniques and tools necessary for creating and analyzing financial models. Students will learn to design models that forecast financial performance, evaluate investments, and support business decisions. The course emphasizes practical skills using real-world case studies, covering areas such as financial statement forecasting, valuation, risk analysis, and scenario planning. By the end of the course, participants will possess the expertise to build robust, dynamic financial models that are integral to strategic planning and investment analysis.

Course Objectives:

- Design and develop structured financial models for various business applications.
- Utilize advanced Excel functions and modeling tools for data analysis and projection.
- Build valuation models, including discounted cash flow (DCF) and comparable company analysis.

- Conduct scenario and sensitivity analysis to evaluate potential financial outcomes.
- Interpret and present financial models effectively to support strategic decision-making.

Units No.	Detailed Syllabus
Unit 1	**Introduction to Financial Modelling:** Overview, importance, and applications of financial models in business, Basic Excel tools and functions for financial modelling.
Unit 2	**Fundamentals of Financial Statements:** Understanding and analyzing balance sheets, income statements, and cash flow statements, Building a 3-statement model.
Unit 3	**Data Collection and Processing:** Gathering, cleaning, and organizing financial data, introduction to financial data sources and databases.
Unit 4	**Forecasting Techniques:** Time series analysis and trend projection, revenue, cost, and expense forecasting methods.
Unit 5	**Building Assumptions and Drivers:** Identifying key business drivers, creating assumption sheets and linking drivers to model outputs.
Unit 6	**Excel Functions for Financial Modelling:** Advanced Excel functions (INDEX, MATCH, IF, LOOKUPs), Introduction to macros and VBA for automation.
Unit 7	**Sensitivity and Scenario Analysis:** Techniques for sensitivity analysis, Building scenarios and performing stress tests.
Unit 8	**Discounted Cash Flow (DCF) Valuation:** Concepts of time value of money and cash flow forecasting, building a DCF model with NPV, IRR calculations.
Unit 9	**Comparable Company Analysis (CCA):** Identifying comparables and collecting relevant data, building and interpreting a CCA model.
Unit 10	**Leveraged Buyout (LBO) Modelling:** Key concepts of leveraged buyouts, structuring and building an LBO model.
Unit 11	**Merger & Acquisition (M&A) Modelling:** Understanding M&A transactions and their financial impacts, developing and analysing an M&A model.
Unit 12	**Risk Analysis and Monte Carlo Simulation:** Introduction to probabilistic models and risk assessment, conducting Monte Carlo simulations in Excel.
Unit 13	**Model Auditing and Error Checking:** Best practices for model validation and auditing, debugging and ensuring model accuracy.
Unit 14	**Presenting and Interpreting Financial Models:** Creating clear and compelling financial dashboards, effectively communicating financial insights to stakeholders.

Reference books:

- Financial Modelling, Simon Benninga, 5th Edition, 2022, MIT Press
- Analysis of Financial Statements, Leopold A. Bernstein & John J. Wild, Year: 2020 (latest edition), McGraw-Hill
- Business Forecasting, John E. Hanke & Dean Wichern, 2020 (10th Edition), Pearson.
- Valuation: Measuring and Managing the Value of Companies, Tim Koller, Marc Goedhart, David Wessels, 2020 (7th Edition), Wiley.

Course Code-DFIN406	BEHAVIOURAL FINANCE

Course Introduction: This course on Behavioural Finance explores the psychological factors influencing financial decision-making and market behaviour. Students will examine how cognitive biases, emotional influences, and social dynamics impact investors, traders, and corporate managers. The course blends traditional financial theory with insights from psychology to explain anomalies in market efficiency and investment behaviour. Through case studies and real-world examples, participants will understand the limitations of rational models, learn to identify behavioural patterns, and develop strategies to mitigate biases. This course equips learners to apply behavioural insights for more informed and balanced financial decisions.

Course Objectives:

- Apply analytical skills for financial decision making.
- Identify the behavioural bias and psychological characteristics of investors.
- Develop strategies to manage wealth effectively and wisely from mispriced assets.
- Practice discussion of capital markets and how we can apply what we learn in class to the financial world.

Units No.	Detailed Syllabus
Unit 1	**Introduction to behavioural finance:** scope, objectives and application; Intellectual underpinnings, Synthesis and future horizons.
Unit 2	**Rational Market Hypothesis:** Basis, Evolution of RMH, Behavioralist; The challenges of behaviouralists;
Unit 3	**The Framework of Rational Finance:** Utility theory, Modern Portfolio Theory, CAPM, Efficient Market Hypothesis, Agency theory.
Unit 4	**Heuristic and Biases:** Functioning of the human mind, familiarity and related heuristics, representativeness and related biases
Unit 5	**Self-Deception:** Overconfidence: forms and causes, other types of self-deception.
Unit 6	**Prospect Theory:** Prospect theory and related concepts.
Unit 7	**Challenges to Efficient Market Hypothesis:** Basis of EMH, Empirical evidence, Challenges to EMH;
Unit 8	**Emotional Factors:** Concepts of emotion, Theories of emotion, Aspects of emotion. Investment and emotions, Social influences and other concepts.
Unit 9	**Investment and emotions, Social influences and other concepts**; implications of overconfidence, emotional influence, behavioral portfolio theory.
Unit 10	**Investing Styles and Behavioural Finance;** Shadow of the Past. Strategies for overcoming Psychological Biases.
Unit 11	**Investor Behaviour:** Describing the individual investor, Heuristic and biases in financial decision making,

Unit 12	**Market Outcomes:** Seasonality and size-effects, momentum and reversal, post-earnings announcement drift, Impact of excess volatility, Bubbles, Behavioural Asset Pricing Model
Unit 13	**Value Investing:** Concept of value investing, Evidence of value investing, Investment approaches of famous value investors.
Unit 14	**Behavioural Corporate Finance:** Behavioural factors and Corporate Decisions on Capital Structure and Dividend Policy - Capital Structure dependence on Market Timing.

Reference Book:

- Behavioral Finance: Psychology, Decision-Making, and Markets, Lucy F. Ackert & Richard Deaves 2020 (2nd Edition), Cengage Learning

- Foundations of Behavioral Finance, Hersh Shefrin, 2020, CFA Institute Investment Series (Wiley)
- A Random Walk Down Wall Street, Burton G. Malkiel, 2023 (13th Edition), W.W. Norton & Company.
- Chandra, P. (2017), Behavioural Finance, Tata Mc Graw Hill Education, Chennai (India).

Course Code-DFIN407	**FINANCIAL ECONOMETRICS**

Course Introduction: This course in Financial Econometrics offers a deep dive into the statistical methods and econometric techniques applied to financial data. Students will explore the fundamentals of time-series analysis, regression models, and hypothesis testing within financial contexts. The course emphasizes real-world applications, enabling participants to analyze market trends, assess risk, and forecast financial variables using econometric software. Through hands-on projects and case studies, learners will develop skills to interpret complex financial data, enhance decision-making, and contribute to evidence-based strategies in finance.

Course Objectives:
- Analyze financial time series data
- Critically review empirical works that use financial time series
- Conduct empirical research on issues of financial markets

Units No.	Detailed Syllabus
Unit 1	**Introduction:** Nature, scope and methodology of econometrics
Unit 2	**Simple Regression with Classical Assumptions**: Least Squares Estimation. Properties of estimators, Multiple Regression Model and Hypothesis Testing Related to Parameters – Simple and Joint. Functional forms of regression models
Unit 3	**Classical time series analysis:** utility of time series analysis – components of time series data.

Unit 4	**Measurement of trend, seasonality and cycles** – moving averages and smoothing techniques for time series analysis
Unit 5	**Classical time Series decomposition models** – additive and multiplicative models
Unit 6	**Forecasting using smoothing techniques and time series** decomposition methods – applications in finance.
Unit 7	**Tools of modern time series analysis** – stochastic and stationary process – tests of stationary – trend vs difference stationary process – Dickey-Fuller and augmented Dickey-Fuller tests.
Unit 8	**Spurious regression and co-integration of time series** – Engle-Granger test – CRDW test – error correction mechanism.
Unit 9	**Univariate time series analysis and forecasting** – linear time series analysis.
Unit 10	**Autocorrelation function and partial auto-correlation** function, Meaning and concept of autocorrelation, Covariance and correlation in time series, Autocorrelation Function (ACF): definition and interpretation, Partial Autocorrelation Function (PACF): definition and interpretation
Unit 11	**Auto-regressive (AR) models**, moving average (MA) models, Box-Jenkins (BJ) ARMA and ARIMA models – identification, estimation and forecasting with ARIMA models – economic applications.
Unit 12	**Multivariate time series analysis and forecasting** – vector autoregressive (VAR) models – advantages and problems.
Unit 13	**Estimation and forecasting with VAR –** impulse response function – Johansen Co-integration test on VAR – Granger causality test – applications in finance.
Unit 14	**Modelling volatility and auto-correlation in time series** – motivation and test for non-linearity – historical and implied volatility – auto-regressive conditional heteroskedasticity (ARCH) model – generalised ARCH model – applications in finance.

Reference Books:

- Basic Econometrics, Damodaran N. Gujarati, Dawn C Porter, McGraw-Hill Education, 2021.
- Econometric Analysis, William H. Greene, Pearson, 2018.
- Using Econometrics: A practical guide, A.H. Studenmund, Pearson, 2017.

Course Code-DFIN408	**FINANCIAL RISK MANAGEMENT**

Course introduction: This course in Financial Risk Management provides a comprehensive understanding of identifying, assessing, and mitigating financial risks within organizations. Students will explore key concepts such as market risk, credit risk, operational risk, and liquidity risk. The curriculum emphasizes risk measurement tools, including Value at Risk (VaR), stress testing, and scenario analysis. Through practical case studies and real-world applications, learners will gain skills in developing risk management frameworks, using derivatives for hedging, and complying with regulatory standards. This course prepares participants to implement effective risk strategies and enhance financial stability in dynamic markets.

Course Objectives:
- To explain the concept, need, types and sources of risk.
- To illustrate the risk management and reporting process.
- To evaluate the risk at the corporate level.
- To describe the several types of swaps.
- To identify the types of options

Unit No.	Detailed Syllabus
Unit 1	**The concept of Risk- Nature**- Need and scope of risk. Source- measurement- identification and evaluation of Risk. Types of risk– Credit, Market, operational risk.
Unit 2	**Possible Risk events-** Risk Indicators. Risk management approaches and methods. Risk reporting process–internal and external.
Unit 3	**Introduction to Derivative Instruments:** Types of vanilla derivative contracts: Forwards, futures, options and swaps,
Unit 4	**Types of underlying assets:** characteristics, Types of players in derivative markets.
Unit 5	**Exotics versus vanilla derivatives:** Forward & Futures Contracts.
Unit 6	**Hedging practices,** specifications & terminology, practices in the futures market.
Unit 7	**Pricing** forwards & futures on various types of underlying assets, hedging with futures contracts
Unit 8	**Option Contracts:** Types of options, practices in options markets, option payoffs, upper & lower bounds of option prices.
Unit 9	**Option strategies:** Option strategies using vanilla option contracts, Spreads and combinations.
Unit 10	**Option Pricing:** Factors affecting option premiums, put-call parity.
Unit 11	**Binomial model of option pricing**, Black-Scholes model of option pricing, ESOPs, and option pricing variants.
Unit 12	**Greeks:** Introduction to Greeks, Black & Scholes option pricing model (BSOPM): Application of Greeks.
Unit 13	**Swaps:** Interest rate swaps, currency swaps.
Unit 14	**Other Derivatives:** Credit risk derivatives, energy derivatives, weather derivatives, commodity derivatives.

References

- Financial Risk Management, Steve L. Allen, Wiley, 2022.
- Risk Management and Financial Institutions, John C. Hull, Wiley, 2023.
- Financial Institutions Management: A Risk Management Approach, Anthony Saunders and Marcia Millon Cornett, McGraw-Hill Education, 2021.

- Enterprise Risk Management, John Fraser and Betty Simkins, Wiley, 2021.
- Quantitative Risk Management, Alexander J. McNeil, Rudiger Frey, and Paul Embrechts, Princeton University Press, 2022.
- Financial Risk Forecasting, Jon Danielsson, Wiley, 2022.

Marketing Management

Course Code- DMKT405	SERVICES MARKETING AND CUSTOMER RELATIONSHIP MANAGEMENT

Course Introduction: This course on Services Marketing and Customer Relationship Management (CRM) focuses on the unique challenges of marketing intangible services and managing customer relationships effectively. It covers key concepts such as service quality, customer satisfaction, and loyalty to create value in service industries. The course emphasizes building long-term relationships and leveraging technology and data-driven insights in CRM. Through real-world cases, learners gain practical understanding of enhancing customer experience. It also helps learners design effective service strategies and implement CRM practices for business growth.

Course Objectives:

- Examine the nature of services, and distinguish between products and services
- Identify the major elements needed to improve the marketing of services
- Develop understanding of relationship marketing and customer service in enhancing customer value and satisfaction.
- Apply services marketing principles to identify and solve marketing problems effectively.

Course Contents:

Units No.	Detailed Syllabus
Unit 1	**Nature and Scope of Services:** Introduction, meaning of services, unique characteristics, difference between services and tangible products, service sector, classification of services, growth of service sectors and service industries
Unit 2	**Services Marketing:** Introduction, concept and evolution of services marketing, meaning of service marketing, myths encountered in services, need for service marketing, and growth in Services Marketing
Unit 3	**Services Marketing Models:** Mix and Gaps Model Introduction, 7Ps of service marketing, service gaps framework, perceived service quality, models of service marketing
Unit 4	**Service Design and Service Delivery:** Introduction, Service delivery process, service encounters and Moments of Truth, employee role in service delivery, service employee- criteria, importance and emotional approach, role of service provider, intermediaries involved in Service Process and Service Delivery
Unit 5	**STP:** Strategy for Services Introduction, Need for segmentation of services, basis of segmentation services, segmentation strategies in service marketing,

	need for targeting and positioning of services, positioning strategies for services, positioning Through Product/Service Delivery Strategies, Positioning Through Pricing Strategies, Positioning through Distribution Strategies, positioning through Sales Promotion and Advertising, Service Differentiation Strategies
Unit 6	**Consumer Behavior in Services Marketing:** Introduction, Customer Expectations in Services, Service Costs Experienced by Consumer, the Role of customer in Service Delivery, Conflict Handling in Services, Customer Responses in Services, Concept of Customer Delight
Unit 7	**Service Development and Quality Improvement**: Introduction, Types of New Service Development and its Stages, Types of new services, Stages in new service development, Service Costs Incurred by the Service Provider, service Blue Printing, service Development – Need, Importance and as a Measure of Competitive Advantage, service Quality Dimensions, Service Quality Measurement and Service Mapping, Improving Service Quality and Service Delivery, Service Failure and Recovery
Unit 8	**Customer Defined Service Standards:** Introduction, Customer Defined Service Standards- Hard and Soft, Concept of Service Leadership and Service Vision, Meeting Customer Defined Service Standards, Service Flexibility Versus Standards, Evaluate Strategies to Match Capacity and Demand, Managing demand, Managing supply, managing Demand and Supply of Service – Lack of Inventory Capability, applications of Waiting Line and Queuing Theories to Understand Pattern Demand
Unit 9	**Integrated Services Marketing:** Introduction, meaning and Importance, Features of Integrated Service Marketing, Integrated Marketing Communication for Service, Reasons for growing importance of integrated marketing communication, Advantages of integrated marketing communication, Integrated Service Marketing Mix, Developing an effective and efficient service marketing system, Integration of service quality measures and managing quality
Unit 10	**Marketing of Services:** Introduction, Overview of Different Service Sectors, Marketing of Banking Services, Marketing in Insurance Sector, Marketing of Education Services, Marketing of Tourism and Airlines, Tourism marketing, Airlines marketing, marketing of Hospitality Services, Healthcare Marketing, Social Service by NGOs, Marketing of Online Services, Marketing of Professional Services
Unit 11	**Emerging Issues in Service Marketing:** Introduction, Strategic approach in Services Marketing, Service Marketing in e-Commerce and e-Marketing, and Telemarketing Services, Service Marketing Research for Global Markets and Rural Markets, Innovations in Services Marketing, Ethical Aspects in Service Marketing
Unit 12	**Customer Relationship Management:** Introduction, Meaning and Definition of CRM, Importance of CRM, Concept and Growth of Relationship Marketing, Scope of Relationship Marketing, concept of lifetime Customer and Customer Loyalty, Benefits and difficulties of CRM
Unit 13	**CRM Process and Implementation:** Introduction, Customer Development Process, customer Retention, Customer satisfaction, Importance of customer

	retention, Customer Retention Strategies, Customer Lifetime Value, types of Relationship Management, CRM process for B2B markets
Unit 14	**Technological Support in CRM:** Introduction, technological Applications in CRM, types of Technological Applications in CRM, Customer Databases and Information Systems, Database Marketing Strategies, CRM Software Solutions for B2C and B2B Markets, Accounting Systems for Customer Acquisition and Retention Costs, Customer Loyalty and Profitability through Technology

Reference Book:

- *Services Marketing: Concepts, Strategies and Cases*, K. Douglas Hoffman and John E.G. Bateson, (6e), Cengage Learning, 2024.
- *Services Marketing: Integrating Customer Focus Across the Firm*, Valarie A. Zeithaml, Mary Jo Bitner, Dwayne D. Gremler, Martin Mende and G. Shainesh, (8e), McGraw Hill, 2025.
- *Services Marketing: People, Technology, Strategy*, Christopher Lovelock and Jochen Wirtz, (9e), Pearson Education, 2022.
- *Customer Relationship Management: Concepts and Technologies*, Francis Buttle and Stan Maklan, (4e), Routledge, 2023.
- *Customer Relationship Management in the Digital Age*, G. Shainesh, Jagdish N. Sheth and Varsha Jain, Routledge, 2025.
- *Services Marketing and Customer Relationship Management*, Dinesh Kumar, Toronto Academic Press, 2024.

Course Code: DMKT406	**STRATEGIC MARKETING**

Course Description

The course business strategy helps organizations take stock of current times, chalk out strategies, deploy and evaluate them for course correction, if any. This course thus adopts a systematic approach towards firm strategies to enable firms to make logical decisions and evolve new goals to keep pace with rapidly changing environments. This course thus helps firms stay ahead in gaining and sustaining competitive advantage and ensure it is foolproof future ready.

Learning Objectives

On completion of this course, students will be able to explain concepts of strategic management as well as to help students to apply their key learnings in various business scenarios to leverage competitive advantage.

Specifically, the student will learn to:

- Describe the concept of business strategy
- Discuss the role of strategic management in policy making
- Explain the need for strategic analysis and environmental scanning
- Understand issues in strategy implementation

- Understand the concept of strategic leadership and competitive advantage

Course Contents:

Units	Syllabus
Unit 1	Introduction to Business Strategy: Introduction, Concept of Business Strategy, Need for Business Strategy, Introduction- Marketing Strategy Blueprint, Marketing Strategy Analysis and Perspectives , Essentials of Effective Strategy, Effects of Inadequate Strategies, Functions of Business Strategies, Value Chain Analysis, Situation analysis: Where are We Now?-Environmental Analysis and Internal Analysis- Market Information and Intelligence. Designing Strategic Control Systems
Unit 2	Business Policy: Introduction, Definition of Business Policy, Factors influencing Business Policy, Business Policy vs. Strategy, Policy decisions and their impact on Business Strategies, Objectives and Significance of Business Policy to Modern Day Organization, Role of Organizational Structure in Strategic Implementation, Aspects of Strategy Implementation
Unit 3	Introduction to Strategic Management : Introduction, Strategic Management – Definition, Meaning and Role, Objectives of Strategic Management, Benefits of Strategic Management, Importance of Strategic Management, Types of Business Level Strategies Causes for failure of Strategic Management, Strategic Visioning: Where do we want to be?- Strategic Marketing Decisions, choices, and mistakes, segmentation targeting, and positioning strategies, branding strategies, relational and sustainability strategies,
Unit 4	Strategic Management Process: Introduction, Strategic Management Process, Strategic Vision and the role of a Strategist, Criteria for Effective strategy, Role of Strategic Management in Policy Making, Historical Development and Levels of Strategic Management in Organization
Unit 5	Strategic Analysis: Introduction, Strategic Analysis – definition, need for Strategic Analysis and Environmental Scanning, Understanding environment of business for strategic analysis, Strategic thinkers and their contributions, Role of Strategic Analysis in Policy making, Introduction to Strategic Choice, Tools and Techniques of Strategic Choice, Analyzing Strategic Analysis And Competitive Advantages, Competition Analysis, Factors Affecting Strategic Analysis, Strategy Evaluation: Did we get there?- strategy implementation, control and metrics-financial measures, market share, customer equity.
Unit 6	Strategy Formulation: Introduction, Types of Strategies, Steps in Strategy Formulation, Core Competencies and their Importance in Strategy Formulation, Company's Mission, Purpose and Objectives of Strategy Formulation, Strategy Formulation Components and Issues, Hierarchy of Strategy Intent
Unit 7	Strategic Planning and Implementation: Strategy Execution: How do we get there?- Product innovation and development strategies, service marketing strategies, pricing and distribution, marketing communication, E-marketing strategies, social and ethical strategies, Introduction, Strategic Planning Process, Types of Strategies, Stability, Expansion or Growth, Mergers and Acquisitions, Activating Strategy, Issues in Strategy Implementation, Integrating the Functional Plan and Policies, Structural Implementation, Behavioural Implementation, Functional Implementation, Business Ethics

Unit 8	Business Process Management Process Identification: Focusing on Key areas, the Designation Phase, the Evaluation Phase, Designing a Process Architecture, Essential Process Modelling
Unit 9	Process management and strategy: Products, processes, and performance, operations strategy and management, Internal and External Techniques of Business Environment Analysis
Unit 10	Process flow metrics: Process flow measures, flow-time analysis. Flow rate and capacity analysis, inventory analysis, process flow variability, Quantitative and Qualitative Process Analysis, Criteria for Strategic Control, Techniques of Evaluation and Control, Operational Control, Components of Operational Control, Techniques of Operational Plan
Unit 11	Process integration: Lean operations: process synchronization and improvement, Dimensions of Functional Plan, Decisions Related to Marketing Plan, Components Related to HR Plan
Unit 12	Process Redesign: Process automation and process intelligence, Redesign Strategies for Operational Excellence, Redesign Tools and Approaches, Process Model Canvas, Concept of Synergy, Techniques For Internal Analysis, Techniques of External Environmental Analysis, Levels of External Environment Analysis
Unit 13	Strategic Leadership: Introduction, Leadership Functions, Leadership Traits, Leadership Styles, Strategic Leadership and Competitive Advantage
Unit 14	Business Strategy: Formulation of Business Strategy in any specific domain: Marketing Strategy Simulation, Case Study approach

References:

- *Strategic Marketing Management*, Alexander Chernev, (11e), Cerebellum Press, 2025.
- *Marketing Strategy and Competitive Positioning*, Graham Hooley, Nigel Piercy, Brigitte Nicoulaud, John Rudd and Nick Lee, (8e), Pearson Education, 2024.
- *Strategic Market Management*, David A. Aaker and Christine Moorman, (12e), Wiley, 2024.
- *Marketing Management*, Philip Kotler, Kevin Lane Keller and G. Shainesh, (17e), Pearson Education, 2025.
- *Marketing 6.0: The Future Is Immersive*, Philip Kotler, Hermawan Kartajaya and Iwan Setiawan, Wiley, 2025.
- *Hyper-Digital Marketing: Six Pillars of Strategic Brand Marketing in an AI-Powered World*, Vanitha Swaminathan, Palgrave Macmillan, 2025.

Course Code: DMKT407	**B2B MARKETING**

Course Description

The B2B Marketing course provides a comprehensive understanding of marketing in business-to-business environments, focusing on the differences between consumer and organizational markets. It covers key concepts such as organizational buying behavior, market segmentation, industrial networks, supply chain relationships, and B2B marketing strategies. The course also emphasizes practical aspects including pricing, sales management, marketing communication, and business product management. Through case studies and simulations, students gain practical insights and skills to address real-world B2B marketing challenges effectively.

Learning Objectives

- Learners will differentiate B2B and consumer markets while analyzing buying behaviour and value chains.
- Learners will design marketing strategies, segment markets, and manage B2B offerings with innovation.
- Learners will apply CRM to build relationships and develop pricing and communication strategies.
- Learners will strengthen problem-solving skills through case studies and real-world applications.

Course Contents:

Units No.	Details
Unit 1	Introduction to Business Markets: Differences between consumer and business markets; Overview of business markets; Characteristics and importance.
Unit 2	Organizational Buying Process: Organizational buying process; Types of buying situations; Buying decision stages.
Unit 3	Supply, Demand, and Value Chains: Understanding supply and demand chains; Value chain significance; Ethics in supply and demand chains.
Unit 4	Organizational Buying Behaviour: Buying behaviour contexts: Commercial, institutional, and government organizations; Buying influencers.
Unit 5	Organizational Decision Making: Decision-making processes in organizations; Role of buying centers; Factors affecting organizational decisions.
Unit 6	Inter-organizational Relationships: Partnerships and alliances; Customer Relationship Management (CRM); Importance of inter-organizational networks.
Unit 7	Industrial Networks and Marketing Channels: Industrial networks; Role of marketing channels; Supply chain management and collaboration.
Unit 8	Segmentation in B2B Markets: Importance of segmentation; Methods and criteria for B2B market segmentation; Niche markets in B2B.
Unit 9	B2B Marketing Planning: Planning process; Situation analysis; Aligning marketing plans with supply and demand chain management.
Unit 10	B2B Marketing Strategy: Developing and implementing marketing strategies; Competitive positioning in B2B markets.
Unit 11	Managing Business Products: Product lifecycle management; Developing new products; Customization and innovation in business products.
Unit 12	Business Services Marketing: Marketing strategies for business services; Differentiating between goods and services in B2B contexts.
Unit 13	Value and Pricing in B2B Markets: Pricing strategies; Value-based pricing; Pricing negotiations and considerations in B2B.
Unit 14	B2B Marketing Communications and Sales Management: Communication tools; Personal selling strategies; Sales management in B2B; Role of key account management.

References:

- Business Marketing Management: B2B, (11e), Cengage Learning, 2014.
- B2B Marketing: A South-Asian Perspective, (Latest ed.), Cengage Learning, 2021.
- Innovative B2B Marketing, (2e), Kogan Page, 2021.
- The Complete Guide to B2B Marketing, (1e), Business Expert Press, 2022.
- Humanizing B2B, (1e), Kogan Page, 2022.
- AI-Powered B2B Marketing, (Latest ed.), Kogan Page, 2023.

Course Code: DMKT408	INTEGRATED MARKETING COMMUNICATION

Course Description

This course provides a comprehensive overview of Integrated Marketing Communication (IMC), emphasizing its role and process within the broader context of marketing. Students will explore the concept of IMC, the promotion mix, and various promotional tools, including advertising, sales promotion, publicity, personal selling, direct marketing, and interactive/Internet marketing.

Course Objectives

- To define the concept of Integrated Marketing Communications (IMC) and its role in the marketing process.
- To describe the components of the promotion mix, including advertising, sales promotion, publicity, personal selling, and direct marketing.
- To utilize different promotional tools effectively, including advertising, sales promotion, and direct marketing, to achieve marketing goals.
- To implement strategies for media planning, media strategy, and media buying in the development of an IMC plan.
- To evaluate the effectiveness of different creative concepts and media strategies in achieving IMC objectives.

Course Contents:

Unit No.	Details
Unit 1	Introduction: Concept of Integrated Marketing Communications (IMC), Process and Role of IMC in Marketing
Unit 2	Promotion mix - Advertising (Classification of advertising, types, advertising appropriation, advertising campaigns)

Unit 3	Sales Promotion (Different types of Sales Promotion, relationship between Sales promotion and advertising)
Unit 4	Publicity (Types of Publicity, relationship between advertising and publicity)
Unit 5	Personal Selling, Direct marketing and direct response methods, Interactive / Internet Marketing
Unit 6	Objectives for IMC Programs: Determining Promotional Objectives, DAGMAR approach
Unit 7	Establishing promotional budget , allocating promotional budget . Strategies of allocation
Unit 8	IMC Message Design-The Creative concept development; the creative processes of the different forms of IMC
Unit 9	AIDA model Considerations for creative idea Visualization. Creative planning, creative strategy development.
Unit 10	Communications appeals and execution, Message strategy design considerations, Source of the message, Message integration, Advertorials and Infomercials
Unit 11	Client Evaluation and approval of Creative Strategy/work. Media Management-Media Types and their characteristics; Setting Media objectives; Considering ke y media concepts
Unit 12	Media planning; Media Strategy; Media buying; Cross media concept; and medi a research, online advertisement
Unit 13	Facilitators in IMC-Advertising Agencies – their role, functions, organisation, Remuneration, client agency relationship, account Planning
Unit 14	Hoarding Contractors; Printers, etc. Ethics and social responsibility in IMC campaigns. Emerging Concepts and Issues Marketing Communications

References:

- *Integrated Marketing Communications: A Global Brand-Driven Approach*, Philip J. Kitchen and Marwa E. Tourky, (2e), Springer, 2022.
- *Integrated Marketing Communication in Digital Age*, Divesh Kumar, Varisha Rehman and Zillur Rahman, Wiley, 2024.
- *Integrated Marketing Communication: A Balanced Approach*, Maxwell Winchester, Peter Ling, Lara Stocchi, May O. Lwin, Wonsun Shin and Hyunjin Kang, Oxford University Press, 2025.
- *Advertising, Promotion, and Other Aspects of Integrated Marketing Communications*, Terence A. Shimp and J. Craig Andrews, (11e), Cengage Learning, 2025.

HRM

COURSE CODE-DHRM405	**COMPENSATION MANAGEMENT**

Course Description:

This course on Compensation Management provides an in-depth understanding of designing and managing effective compensation systems within organizations. Students will explore key concepts such as job evaluation, pay structures, performance-based incentives, and benefits administration. The course emphasizes the strategic role of compensation in attracting, motivating, and retaining talent, while ensuring internal equity and external competitiveness. Through case studies and practical applications, learners will gain skills in developing compensation policies aligned with organizational goals and legal compliance. This course equips participants to create fair, motivating, and sustainable compensation plans that drive organizational performance.

Course Objectives:

On completion of this course, learners will be able to:

- Understand the concepts, components, and strategic significance of compensation management
- Analyse internal and external factors influencing wage and salary administration
- Evaluate job evaluation methods, pay structures, incentive schemes, and employee benefit programs.
- Develop performance-linked, equitable, and tax-efficient compensation systems.
- Examine reward management practices, managerial remuneration, and international compensation strategies in organizations.

Course Contents:

Unit No.	Detailed Syllabus
Unit 1	Compensation management: Compensation Management, Compensation and Non-compensation Dimensions, 3-P Concept in Compensation Management, Compensation as a Retention Strategy, Compensation for Special Groups, Significant Compensation Issues.
Unit 2	Wages and Salary Administration at Macro (National) Level: Wage Concept, Wage Policy, Institutional Mechanisms for Wage Determination, Pay Commission, Wage Boards, Public Sector Pay Revision, ILO and Collective Bargaining, Union Role in Wage and Salary Administration
Unit 3	Job Evaluation: Wages and Salary Administration at Micro Level, Concept of Equity, Job Evaluation - Methods of job evaluation and System of job evaluation, Process of Job Evaluation, Problems Involved in Job Evaluation
Unit 4	Grading and Compensation Structure: Concept of Salary Structure, Salary Progression, Methods of Payment, Limitations of Job-Related Compensation, Competency based Compensation (Broad pay bands and 360-degree feedback)
Unit 5	Incentive Schemes: Pay for Performance: Types of Incentive Schemes, Wage Incentive Plans, Pre-requisites of Effective Incentive Schemes, Merits and Demerits of Incentives, Pay for Performance Plans
Unit 6	Benefits and Services: Concept and Nature of Benefits, Classification of Employee Benefits, Employee Benefit Programs, Long term Incentive plans, Strategic Perspectives on Benefits, Factors Influencing Choice of Benefit Program, Administration of Benefits and Services, Employee Services – Designing a Benefit Package.

Unit 7	Tax Planning: Concept of Tax Planning, Role of Tax Planning in Compensation Benefits, Tax-efficient Compensation Package, Tax Implications of Employee Compensation Package to Employer, Fixation of Tax Liability, Salary Restructuring, Recent Trends in Taxation
Unit 8	Voluntary Retirement Scheme: Concept of Voluntary Retirement Scheme (VRS), Approaches to Deal with Workforce Redundancy, Costs and Benefits to the Company, VRS for Public Sector Employees, The Worker Adjustment and Retraining Notification Act (WARN) .
Unit 9	Compensation Strategy: New Thinking for the New Millennium: Pay the Person, Reward Excellence, Individualising the Pay System, Organisational and External Factors Affecting Compensation Strategies, Compensation Strategies as an Integral Part of HRM, Compensation Policies.
Unit 10	Managerial Remuneration: Concept and Elements, Executive Compensation: Methodology, CEO-to-worker pay ratio, Rewarding – A New Approach, Remuneration Ceilings, Remuneration Ceilings under Section XIII, Benchmark Compensation Package as per the Industry Standards.
Unit 11	Performance Linked Compensation: Performance management, Performance Appraisal and Measurement, Pay for Performance Plans, Balancing of Internal and External Equity.
Unit 12	Pay Structures: Performance Based and Pay Based Structures, Designing Pay Structures, Comparison in Evaluation of Different Types of Pay Structures, Designing Pay Ranges and Bands, Significance of Factors Affecting Pay Levels.
Unit 13	Rewards & Recognition: Concept of Reward Management, Developing Reward Policies, Reward Strategy, Developing Total Reward Approach, Reward Management in Service Sector, Total Reward Framework of Service Industries in India, Factors affecting Reward Management Policies in Service Sector, Process of Designing a Successful Reward Strategy.
Unit 14	Reward Management in Service Sector at Micro Level: Concept of Reward System in Service Organisations, Elements of Reward System, Designing Reward Systems, Recognizing and Rewarding Service Excellence, Reward Strategy and Performance Management in Insurance

Textbook:

- Compensation, Barry Gerhart, Jerry Newman & George Milkovich (14th ed.), McGraw Hill Education (2023).

Reference Books:

- Strategic Compensation: A Human Resource Management Approach, Joseph J. Martocchio (11th ed.), Pearson Education (2024).
- Employee Reward Management and Practice, Michael Armstrong & Duncan Brown (7th ed.), Kogan Page (2022)
- Armstrong, M., & Brown, D. (2022). Employee reward management and practice (7th ed.). Kogan Page.

COURSE CODE-DHRM406	PERFORMANCE MANAGEMENT

Course Description:
This course provides a comprehensive understanding of performance management systems, performance appraisal methods, and employee performance evaluation in organizations. It introduces learners to the theoretical foundations, principles, processes, and dimensions of performance management and its linkage with other HR functions.

The course covers performance planning, appraisal systems, feedback mechanisms, 360-degree appraisal, team and virtual team performance, and the relationship between performance and rewards. It also emphasizes the role of line managers, automation in performance management systems, and ethical issues in performance appraisal practices.

Course Objectives:

On completion of this course, learners will be able to
- Understand the concepts and process of performance management.
- Examine performance appraisal methods and feedback systems.
- Apply performance standards and evaluation techniques.
- Analyze the role of performance management in employee development and rewards.
- Design ethical and effective performance management systems.

Course Contents:

Unit No.	Detailed Syllabus
Unit 1	Introduction to Performance Management: Definition of Performance Evaluation, Evolution of Performance Management, Definitions and Differentiation of Terms Related to Performance Management. What a Performance Management System Should Do? Importance of Performance Management, Linkage of Performance Management to Other HR Processes
Unit 2	Theoretical Framework of Performance Management: Goal Theory and its Application in Performance Management, Control Theory and its Application in Performance Management, Social Cognitive Theory and its Application in Performance Management, Organisational Justice Theory and its Application in Performance Management
Unit 3	An Overview of Performance Management: Aims of Performance Management, Purpose of Performance Management, Employee Engagement and Performance Management, Principles of Performance Management, Overview of Performance Management as a System, Dimensions of Performance Management
Unit 4	Process of Performance Management: Performance Management Process, Performance Management Planning Process, Mid-cycle Review Process, End-cycle Review Process, Performance Management Cycle at a glance.
Unit 5	Performance Management Planning and Development: Introduction, Performance Management Planning, the Planning Process, Performance Agreement, drawing up the Plan, Evaluating the Performance Planning Process.

Unit 6	Mechanics of Performance Management Planning and Documentation: The Need for Structure and Documentation, Manager's Responsibility in Performance Planning Mechanics and Documentation, Employee's Responsibility in Performance Planning Mechanics and Documentation, Mechanics of Performance Management Planning and Creation of PM Document
Unit 7	Performance Appraisal: Definitions and Dimensions of PA, Purpose of PA and Arguments against PA, Necessity of Performance Appraisal and its Usage by Organizations, Characteristics of Performance Appraisal, Performance Appraisal Process, Mistakes made by Human Resource Department
Unit 8	Performance Appraisal Methods: Performance Appraisal Methods, Traditional Methods, Modern Methods, and Performance Appraisal of Bureaucrats – A New Approach
Unit 9	Performance Appraisal Feedback: Feedback-Role, Types and Principles, Situations Requiring Feedback and Pitfalls, Components of a Feedback and Steps in giving a Constructive Feedback, Levels of Performance Feedback
Unit 10	360-Degree Appraisal: Introduction, Impact of 360-Degree Feedback on Organisations, Concept of 360-Degree Feedback System, Purpose, Methodology, Ratings, Advantages and Disadvantages of the Method, The Process of 360-Degree Feedback, Operating 360-Degree Appraisal
Unit 11	Issues in Performance Management – I: Team Performance, Performance of Learning Organisations and Virtual Teams: Team Performance Management, Performance Management and Learning Organisations, Performance Management and Virtual Teams.
Unit 12	Issues in Performance Management – II: Role of Line Managers, Performance Management and Reward: Role of Line Managers in Performance Management, Performance Management and Reward, Concepts related to Performance and Reward, Linking Performance to Pay – A Simple System Using Pay Band, Linking Performance to Total Reward, Challenges of Linking Performance and Reward.
Unit 13	Facilitation of Performance Management System through Automation: Improving Quality of Planning and Design of Performance Management, Improving the Objectivity of Performance Management, Improving Execution Aspects of Performance Management, Automation in Performance Management, Automation Process.
Unit 14	Ethics in Performance Appraisal: Ethics-An Overview, Ethics in Organisations, Ethics in Performance Management, Realities of Ethics in Performance Management, Ensuring Ethics in Performance Management

Textbook:

- Armstrong's Handbook of Performance Management: An Evidence-Based Guide to Performance Leadership, Michael Armstrong, Kogan Page, 2022.

Reference Books:

- Performance Management, Herman Aguinis, SAGE Publications, 2024. (Formerly published by Chicago Business Press)
- Performance Appraisal and Compensation Management: A Modern Approach, Dewakar Goel, PHI Learning Private Limited, 3rd Edition, 2023.

COURSE CODE-DHRM407	LEARNING ORGANIZATIONS

Course Description:
This course focuses on building and sustaining organizations that prioritize continuous learning to remain competitive in a rapidly changing business environment. Students will explore emerging business realities, systems thinking, knowledge management, and the role of leadership in fostering a learning culture. Through case studies and practical tools, the course equips students to implement learning dynamics, empower employees, and leverage technology for innovation. By the end, students will be able to architect learning organizations, overcome barriers, and drive continuous improvement for sustained success.

Course Objectives

On completion of this course, learners will be able to:

- Understand the concept and importance of learning organizations.
- Apply systems thinking and learning tools for organizational improvement.
- Explore strategies for managing knowledge and innovation.
- Measure organizational learning and intellectual capital.
- Develop leadership skills to foster a learning culture.

Course Contents:

Unit No.	Detailed Syllabus
Unit 1	The Emerging Need for Learning Organizations: Evolving business realities: globalization, technological disruption, and innovation. The critical need for organizations to adapt to stay competitive in dynamic environments. The importance of organizational learning in building sustainable growth. How learning organizations contribute to long-term organizational resilience.
Unit 2	Organizational Learning: The concept of dynamic capabilities: how organizations sense, seize, and transform their learning. Building and leveraging core capabilities for continuous learning. Absorptive capacity: the ability to assimilate and apply new knowledge.
Unit 3	Systems Thinking and Organizational Learning: Introduction to systems thinking, key principles of interdependence, feedback loops, and causal relationships. Systems thinking as a framework for diagnosing and solving complex organizational problems. Integrating systems thinking into organizational learning processes.
Unit 4	Learning Tools and Techniques for Organizations: Key learning tools: brainstorming, scenario planning, learning cycles, action learning, and case studies. Digital learning platforms and their role in enhancing organizational learning. Techniques for fostering team-based learning and knowledge sharing.
Unit 5	Benchmarking and Process Mapping for Organizational Learning:

	Benchmarking: methods for comparing organizational performance against industry leaders. Process mapping: visualizing workflows and identifying areas for improvement. How benchmarking and process mapping can promote continuous learning
Unit 6	Knowledge-Based Competition and Competitive Advantage: The rise of knowledge as a strategic asset and its impact on competition. How knowledge-based competition shapes business strategy and innovation. Examples of organizations that leverage knowledge for competitive advantage
Unit 7	Knowledge-Creation and Acquisition Processes: The process of knowledge creation: Nonaka's SECI model (Socialization, Externalization, Combination, Internalization). Knowledge acquisition strategies: how organizations capture and integrate external knowledge. Barriers to knowledge creation and strategies to overcome them
Unit 8	Measuring Learning and Intellectual Capital: The concept of intellectual capital: human, structural, and relational capital. Methods for measuring organizational learning and intellectual capital. How intellectual capital influences performance and innovation.
Unit 9	Architecting a Learning Organization: Principles for designing an organization that fosters continuous learning. The role of leadership, culture, and structure in creating a learning organization. Strategies for embedding learning at every level of the organization.
Unit 10	Empowering and Enabling People in Learning Organizations: Empowerment strategies: giving employees autonomy and responsibility. Leadership's role in enabling a learning environment. Creating a culture of trust, innovation, and continuous learning.
Unit 11	Technology for Building the Learning Organization: The role of technology in facilitating organizational learning (e.g., Learning Management Systems, knowledge-sharing platforms). AI, machine learning, and big data in fostering innovation and knowledge sharing. Tools for managing virtual teams and enhancing digital learning.
Unit 12	Becoming a Learning Organization: Steps and frameworks for transitioning into a learning organization. Overcoming common barriers to becoming a learning organization (e.g., resistance to change, siloed knowledge). Building a learning-oriented organizational culture.
Unit 13	The Role of Leadership in Learning Organizations: Leadership styles that foster learning (e.g., transformational leadership, servant leadership). Developing leaders who support and drive organizational learning. Leadership's role in sustaining a learning culture over time.
Unit 14	Overcoming Barriers to Organizational Learning: Identifying common barriers: cultural, structural, and individual resistance to learning. Strategies for overcoming these barriers. Creating an open, inclusive, and transparent environment for learning.

Textbook:

- Learning and Organisational Development Essentials, Graham Willard, Kogan Page, 2021

Reference Books:

- The Fifth Discipline: The Art and Practice of the Learning Organization, Revised Edition, Doubleday/Crown Business, 2006.
- International Business: Concept, Analysis and Strategy, Atlantic Publishers and Distributors Pvt. Ltd., 2021.
- Artificial Intelligence for Learning Organizations, Donald Clark, Kogan Page, 2020.
- Digitalisation and Organisation Design: Knowledge Management in the Asian Digital Economy, Mohammad Nabil Almunawar, Md Zahidul Islam, and Patricia Ordóñez de Pablos (Eds.), Routledge, 2023.

COURSE CODE-DHRM408	**ORGANIZATIONAL CHANGE AND DEVELOPMENT**

Course Description:
This course on Organizational Change and Development explores the theories, strategies, and practices involved in managing change within organizations. Students will learn about the dynamics of organizational transformation, from diagnosing issues to designing and implementing change initiatives. The course emphasizes the role of leadership, communication, and culture in successfully navigating change, as well as the importance of employee involvement and resistance management. Through case studies and practical applications, learners will gain skills in developing change strategies that improve organizational effectiveness, enhance adaptability, and drive long-term growth. This course equips participants with the tools to lead and manage sustainable change in diverse organizational settings.

Course Objectives:

On completion of this course, learners will be able to
- Gain an appreciation for the impact of change management on organizational results
- Understand foundational aspects of change management and the critical role managers play in the change process
- Learn a practical framework for processing the many changes that impact managers
- Create action plans to move employees past barrier points and on to desired outcomes

Course Contents:

Unit No.	**Detailed Syllabus**
Unit 1	Organisational Change Management: Understanding Organizational Transformation, Transformation Strategies, Process of Organizational Transformation, Nature of Organizational Change, Perspectives of Organizational Change
Unit 2	Models of Organizational Change: Process-based Change Models, Content-based Change Models, Individual Change Models, Integration of Change Models.

Unit 3	Communicating Change: Need for Communicating Change, Factors Involved in Communicating Change, Methods and Techniques for Communicating Change, Role of Top Management in Communicating Change.
Unit 4	Process of Change Management: Change Management Process, Phases of the Change Management Process, Change Management Process Control.
Unit 5	Resistance to Change: Concept of Resistance to Change, Forms of Resistance, Reactions to Change, Resistance to Organizational Change Initiatives, Overcoming the Resistance to Change, Techniques to Overcome Resistance.
Unit 6	Implementing Change: Implementation of Change, the Delta Technique, Developing an Implementation Plan, Gaining Support and Involvement of Key People, Developing Enabling Organizational Structures, Celebrating Milestones
Unit 7	Strategies for Implementing Change: Introduction, Types of Change Management Strategies, Factors Affecting the Choice of a Change Strategy, Formulating and Facilitating Change, Implementing Change.
Unit 8	Leading Changes: Visionary Leadership, Leadership Framework, Creating Shared Vision, Role of Leaders in the Phases of Organizational Change
Unit 9	Maintaining Organizational Effectiveness: Meaning of Organizational Effectiveness, Difference between Effectiveness and Efficiency, Approaches to Organizational Effectiveness, Perspectives of Organizational Effectiveness, Factors in Achieving Organizational Effectiveness.
Unit 10	Evaluating Organizational Change: Concept of Monitoring and Evaluation, Measurement and Methods of Evaluation, Feedback Process, Continuous Incremental Change.
Unit 11	Change Agents: Meaning and Concept of Change Agents, Types of Change Agents, Role and Competencies of a Change Agent, Change Agent Styles, Areas that Change Agents can change.
Unit 12	Culture and Change: Introduction, Concept of Organizational Culture, Dimensions of Culture, Type of Culture, Assessing Organizational Culture, Role of Culture in Managing Change.
Unit 13	Individual Change: Need for Individual Change, Personality and Change, Learning and Individual Change, Approaches to Individual Change, Implications of Change in Individuals.
Unit 14	Organizational Learning and Learning Organization: Concept of Organizational Learning, Process of Organizational Learning, Types of Organizational Learning, Disciplines Practiced in Organizational Learning, Concept of Learning Organizations, Individual Skill Sets in Learning Organizations

Reference Books:

- Organization Development and Change, Thomas G. Cummings and Christopher G. Worley, 12th Edition, Cengage Learning, 2024.
- Organization Development: The Process of Leading Organizational Change, Donald L. Anderson, 6th Edition, Sage Publications, 2024

Analytics and Data Sc

COURSE CODE-DADS405	**ADVANCED MACHINE LEARNING**

Course Introduction: This course on Advanced Machine Learning delves into the more sophisticated algorithms and techniques used to solve complex problems in data science and artificial intelligence. Students will explore advanced topics such as deep learning, reinforcement learning, natural language processing (NLP), and unsupervised learning. The course focuses on both the theoretical foundations and practical applications of these techniques, providing learners with the skills to implement machine learning models using state-of-the-art tools and frameworks.

Learning objectives:

- Fit Time-Series Data using ARIMA model
- Describe some applications of Deep Learning
- Use Image Recognition techniques in Deep Learning
- Describe Reinforcement Learning

Unit No.	Details
Unit 1	**Introduction to Time Series:** What is Time Series, Forecasting Time-Series Data.
Unit 2	**Stationary Process and ARIMA Models:** Stationary Time Series, Non-Stationary Time Series, Auto Regressive Models, ARIMA Models.
Unit 3	**Exponential Smoothing Models:** Double Exponential Smoothing Techniques, Triple Exponential Smoothing Techniques.
Unit 4	**ARCH/GARCH Models:** Introduction to ARCH/GARCH Models, Non-Stationary Data, ARCH Models, GARCH Models.
Unit 5	**Introduction to Artificial Intelligence (AI):** Introduction to AI, Types of AI, Merits and Demerits of AI.
Unit 6	**Applications of Artificial Intelligence:** Application of AI in Business Analytics, Medical Sciences, and Industry.
Unit 7	**Introduction to Deep Learning:** Introduction to Deep Learning, Deep Learning Process, Applications of Deep Learning.
Unit 8	**Artificial Neural Networks (ANN):** Introduction to Neural Networks, Classification of Neural Networks, Merits of Neural Networks, Understanding Multi-Layer Perceptron Network (MLPN), Feed Forward Network (FFN), and Back Propagation Network (BPN).
Unit 9	**Convolutional Neural Networks (CNN):** Introduction to CNN, Understanding CNN Architecture, Implementing CNN Using R.
Unit 10	**Applications of Deep Learning:** Recurrent Neural Networks (RNN), Long Short-Term Memory (LSTM) Networks, Auto-Encoders.
Unit 11	**Reinforcement Learning:** Introduction to Reinforcement Learning, Reinforcement Learning Applications Using R.
Unit 12	**Image Recognition using Deep Learning:** Working with Image Data, Image Classification Using R.
Unit 13	**Case Study on Time Series:** Fitting ARIMA Models in Time-Series Data.

Unit 14	**Case Study on Reinforcement Learning:** Reinforcement Learning Applications Using R.

Reference Books

- The Analysis of Time Series – an Introduction by Chris Chatfield, Chapman & Hall/CRC
- Time Series Analysis: Forecast and Control by Box and Jenkins

COURSE CODE-DADS406	**UNSTRUCTURED DATA ANALYSIS**

Course introduction: This course on Unstructured Data Analysis focuses on methods and tools for extracting valuable insights from unstructured data, such as text, images, audio, and video. Students will explore key concepts in natural language processing (NLP), computer vision, and speech recognition, along with advanced data mining techniques. The course covers the use of machine learning algorithms to process, analyze, and interpret large volumes of unstructured data. Through hands-on projects and real-world case studies, learners will gain practical experience in dealing with challenges like data cleaning, feature extraction, and sentiment analysis. This course equips participants to apply cutting-edge techniques to unlock the potential of unstructured data in diverse industries.

Learning objectives:

- Describe how to analyse unstructured data
- Create word cloud
- Perform sentiment analysis
- Use Machine Learning techniques to detect fake news

Unit No.	Detailed Syllabus
Unit 1	**Introduction to Unstructured Data:** What is Unstructured Data, Difference between Structured and Unstructured Data, Analysing Unstructured Data.
Unit 2	**Feature Extraction in Unstructured Data:** Feature Extraction Techniques for Textual Data and Pictorial Data.
Unit 3	**Word Cloud Creation:** Introduction to Word Cloud, Creation of Word Cloud Using R.
Unit 4	**Text Classification:** Pre-processing the Data for Text Classification, Classification Using Different Classifier Models.
Unit 5	**Sentiment Analysis:** Different Sentiment Analysis Models, Performing Sentiment Analysis Using R.
Unit 6	**Topic Modelling:** Introduction to Topic Modelling, Examples of Topic Modelling, Topic Modelling vs. Topic Classification, Latent Semantic Analysis (LSA), Latent Dirichlet Allocation (LDA).

Unit 7	**Introduction to NoSQL Databases:** Difference between SQL and NoSQL Databases, Types of NoSQL Databases, Working of NoSQL Databases.
Unit 8	**MongoDB and NoSQL Operations:** Performing Basic Operations in NoSQL Databases, Introduction to MongoDB, Working with MongoDB.
Unit 9	**Working with Audio Data:** Introduction to Audio Data, Techniques for Working with Audio Data.
Unit 10	**Audio Data Classification:** Pre-processing Audio Data, Audio Data Classification Techniques.
Unit 11	**Working with Image Data:** Introduction to Image Data, Pre-processing Image Data.
Unit 12	**Image Data Classification:** Techniques and Algorithms for Image Data Classification.
Unit 13	**Introduction to Video Classification:** Working with Video Data, Video Data Classification Techniques.
Unit 14	**Case Study – Fake News Prediction:** Importing Fake News Data, Processing Fake News Data, Classification of Fake News.

Reference Books

- Tan, Steinbach and Kumar, "Introduction to Data Mining"
- Camastra and Vinciarelli "Machine Learning for Audio, Video and Image Analysis"

COURSE CODE-DADS407	**BUSINESS ANALYTICS**

Course Introduction: This course on Business Analytics provides a comprehensive understanding of data-driven decision-making processes in business contexts. Students will explore key concepts such as descriptive, predictive, and prescriptive analytics, using statistical techniques and tools to analyze business data. The course emphasizes the application of analytics to areas like sales, marketing, operations, and finance, enabling learners to identify trends, forecast outcomes, and optimize business strategies. Through practical examples and case studies, students will gain hands-on experience with popular analytics tools and software. This course prepares participants to leverage business analytics to improve performance, solve complex business problems, and drive strategic growth.

Learning objectives:

- Perform Conjoint Analysis for designing optimum products
- Create Credit Risk Models
- Describe different techniques in digital marketing
- Describe what is Robotic Process Automation

Unit No.	Detailed Syllabus
Unit 1	**Using Analytics in Business:** Introduction to Business Analytics, Types of Analytics, Use of Analytics in Different Business Domains, Analytics Tools.
Unit 2	**Conjoint Analysis:** Introduction to Conjoint Analysis, Types of Conjoint Analysis, Steps and Applications of Conjoint Analysis, Performing Conjoint Analysis Using R.
Unit 3	**Campaign Analytics:** Introduction to Campaign Analytics, Email Campaign Analytics, TRP and GRP, Trend and Adstock Effect, Modelling Campaign Effectiveness.
Unit 4	**Multi-dimensional Scaling (MDS):** Introduction to Multi-dimensional Scaling, Steps in MDS, Performing MDS Using R.
Unit 5	**Perceptual Maps:** Introduction to Perceptual Maps, Types and Applications of Perceptual Maps, Creating Perceptual Maps Using R.
Unit 6	**Credit Risk Modelling:** Introduction to Credit Risk Modelling, Different Types of Credit Risk Models, Credit Risk Modelling Using R.
Unit 7	**Customer Propensity Modelling:** Introduction to Customer Propensity Modelling, Different Types of Propensity Models.
Unit 8	**Advanced Propensity Models:** Creating Propensity Models Using R, Using Neural Networks in Propensity Models.
Unit 9	**Price Optimization:** Price Elasticity of Demand, Modelling Price-Demand Curve, Optimizing Price Strategies.
Unit 10	**Digital Marketing Analytics:** Traditional Marketing vs. Digital Marketing, Different Digital Marketing Techniques and Analytics Approaches.
Unit 11	**Attribution Models:** Attribution Modelling, A/B Testing Techniques and Applications.
Unit 12	**Introduction to Robotic Process Automation (RPA):** What is RPA, Business Benefits of RPA, Features and Capabilities Required for RPA.
Unit 13	**RPA Concepts and Implementation Approaches:** Different Approaches to RPA, Five-Step Implementation Approach of RPA.
Unit 14	**Case Study – Employee Attrition Analysis:** IBM Employee Attrition Data Analysis Using R.

Reference Books

- Marketing Models (Kotler, Lilien, Moorthy)
- Measuring Marketing: 101 key metrics every marketer needs (Davis)Marketing Analytics, Wayne L Winston, Wiley

COURSE CODE-DADS408	DATA SCRAPPING

Course introduction: This course on Data Scraping introduces the techniques and tools used to extract structured and unstructured data from websites and online sources. Students will learn how to navigate web pages, handle various data formats (HTML, JSON, XML), and use programming languages like Python to automate data collection. The course covers essential scraping techniques, such as web scraping, API integration, and handling dynamic content, along with ethical considerations and legal implications of data scraping. Through practical exercises and real-world projects, learners will gain the skills to gather and process large datasets for analysis, research, and business intelligence applications.

Learning objectives:

- Scrap Data from different websites
- Use 'DPLYR' function for scrapped data analysis
- Detect and Improve Data Quality after scrapping

Unit No.	**Detailed Syllabus**
Unit 1	**Introduction to Data Scrapping and Wrangling:** Introduction to Data Scrapping, Tools Used for Data Scrapping, Ethical Considerations in Data Scrapping and Data Wrangling.
Unit 2	**Finding Data Across Sources:** Process of Data Scrapping, Scrapping Data from Different Sources, Identifying Appropriate Data Sources, Website Structuring for Data Extraction.
Unit 3	**Manual Scrapping:** Introduction to Manual Data Scrapping, Data Scrapping Using R.
Unit 4	**Scrapping Data from Wikipedia:** Scrapping Wikipedia Data, Data Scrapping Using R.
Unit 5	**Scrapping Amazon Feedback Data:** Introduction to Amazon Feedbacks, Scrapping Amazon Feedback Data.
Unit 6	**Scrapping Data from Naukri:** Scrapping Data from Naukri, Exporting and Storing Scrapped Data into Files.
Unit 7	**API-Based Scrapping:** Introduction to API-Based Scrapping, Applications and Uses of API-Based Data Scrapping.
Unit 8	**Scrapping Data from Twitter:** Use of Standard R Libraries for Twitter Scrapping, Scrapping Tweets and User Data Using R.
Unit 9	**Scrapping Cryptocurrency Data:** Cryptocurrency Data Scrapping Using R, Converting Cryptocurrency Data into Standard Formats.
Unit 10	**Basics of Data Wrangling:** Introduction to Data Wrangling, Process and Techniques of Data Wrangling.
Unit 11	**Data Quality Detection:** Understanding Data Quality, Data Quality Detection Techniques, Improving Data Quality.
Unit 12	**'DPLYR' Functions in R:** Uses of 'DPLYR' Functions in R, Improving Data Quality Using 'DPLYR' Functions.
Unit 13	**Scrapping Feedback Data:** Scrapping Feedback Data from Different Sources, Presenting Scrapped Data in Proper Formats.
Unit 14	**Scrapping Data from Grotal.com:** Scrapping Vendor Data from Grotal.com, Presenting Scrapped Data in Proper Formats.

Reference Books

- Munzert, S., Rubba, C., Meißner, P., & Nyhuis, D. (2014). Automated data collection with R: A practical guide to web scraping and text mining. John Wiley & Sons.
- Bradley, A., & James, R. J. (2019). Web scraping using R. Advances in Methods and Practices in Psychological Science, 2(3), 264-270.
- Krotov, V., & Tennyson, M. (2018). Research note: scraping financial data from the web using the R language. Journal of Emerging Technologies in Accounting, 15(1), 169-181.

IT and Fintech

COURSE CODE-DITF405	E-COMMERCE

Course Description:
This course on E-Commerce provides an in-depth understanding of the digital marketplace, exploring the strategies, technologies, and models that drive online businesses. Students will learn about various e-commerce business models, digital payment systems, online marketing, and customer behaviour in the digital age. The course emphasizes practical knowledge, focusing on tools and platforms used to launch and manage successful online businesses. Through case studies and hands-on projects, learners will gain insights into building effective e-commerce strategies, managing logistics, and ensuring secure online transactions in a rapidly evolving market.

Course Objectives:
On completion of this course, learners will be able to:
- Understand the different types of e-commerce models (B2B, B2C, C2C, etc.) and their applications.
- Develop strategies for digital marketing, customer acquisition, and engagement in an e-commerce setting.
- Analyse the role of payment systems, security protocols, and regulatory frameworks in online transactions.
- Apply tools and technologies to manage e-commerce platforms, inventory, and supply chains.
- Evaluate the impact of e-commerce trends on consumer behaviour, business operations, and competitive advantage.

Course Content:

Unit No.	Detailed Syllabus
Unit 1	Introduction to e-Commerce: Overview of e-commerce, E-commerce Framework, Anatomy of E-commerce Applications, Role of Media Convergence in E-commerce
Unit 2	Evolution of e-Commerce: History and Growth of E-commerce, Advantages and Disadvantages, E-commerce in India, Opportunities in Indian Industries, Challenges in E-transactions

Unit 3	Network Infrastructure: Internet Hierarchy, Building Blocks of E-commerce, Network Layers, TCP/IP Protocols, Advantages of Internet in E-commerce
Unit 4	e-Commerce Infrastructure: Computer and Web Server Hardware, Server Software, Types of E-commerce Software
Unit 5	Managing the e-Enterprise: E-business Enterprise Concepts, Comparison with Traditional Organisations, Role of Organisations in E-enterprise
Unit 6	e-Commerce Process Models: Business Models, Relationship-based E-business Models, E-commerce Sales Life Cycle (ESLC)
Unit 7	Risks of Insecure Systems: Risks in Online Transactions, Customer Risks (Fraud, Data Theft), Agent Risks, Business Transaction Risks
Unit 8	Management of Risk: Risk Management Components, Disaster Recovery Plans, Risk Assessment and Control Mechanisms
Unit 9	Electronic Payment Systems: Types of Payment Systems, E-cash, Smart Cards, Credit Cards, Security and Privacy Issues
Unit 10	Electronic Data Interchange (EDI): History, Implementation Challenges, Working of EDI, Relationship with Internet
Unit 11	e-Marketing: Scope of Online Marketing, 4Ps of Internet Marketing, Digital Marketing Techniques
Unit 12	Website Design Issues: Website Design Process, Goal Setting, Budgeting, Development Strategies
Unit 13	Consumer-Oriented Business: Customer Markets, One-to-One Marketing, Consumer Demographics, Customer Loyalty, Search Engines, Online Catalogues
Unit 14	Management Challenges and Opportunities: New Business Models, Process Changes, Channel Conflicts, Legal and Regulatory Environment, Security and Privacy Issues

Reference Books:

- Laudon, K. C., & Traver, C. G. (2021). E-commerce: Business, technology, society (16th ed.). Pearson.
- Chaffey, D., & Ellis-Chadwick, F. (2019). Digital marketing: Strategy, implementation, and practice (7th ed.). Pearson.
- Schneider, G. P. (2017). Electronic commerce (12th ed.). Cengage Learning.
- Turban, E., King, D., Lee, J. K., Liang, T. P., & Turban, D. C. (2018). Electronic commerce: A managerial and social networks perspective (9th ed.). Springer.
- B2B E-Commerce - Business Models, Strategies, and Tools. (2018). Harvard Business Review Press.

COURSE CODE-DITF406	**FINTECH PAYMENTS AND REGULATIONS**

Course Description:

This course on FinTech, Payments, and Regulations explores the intersection of financial technologies, digital payment systems, and the regulatory frameworks that govern them. Students will gain a deep understanding of how innovative financial technologies such as mobile payments, digital wallets, and peer-to-peer lending platforms are transforming the financial landscape. The course covers the legal and regulatory challenges related to payments, including anti-money laundering (AML), Know Your Customer (KYC), and data privacy. Through case studies and real-world examples, learners will develop the knowledge to navigate the complexities of the rapidly evolving FinTech ecosystem.

Course Objectives:
On completion of this course, learners will be able to:

- Comprehend the fundamental concepts and technologies underpinning various fintech payment systems.
- Analyse the key drivers and trends shaping the evolution of fintech payments.
- Evaluate the role of regulatory bodies and their approaches to fostering innovation while mitigating risks within the fintech payments ecosystem.
- Apply relevant regulatory principles and frameworks to analyse real-world case studies and scenarios in the fintech payments domain.

Course Contents:

Unit No.	**Detailed Syllabus**
Unit 1	Overview of FinTech: Introduction to FinTech and Robo-Advising, Objectives and Goals of FinTech
Unit 2	Key Areas of FinTech and Financial Applications: Changing Attitudes towards Financial Advice, Trust in Financial Industry, Financial Behaviour of Millennials, Impact of Technology on Personal Finance
Unit 3	Growth of FinTech in Global Markets: Valuation of Robo-Advisors, Growth of FinTech, Role of InsurTech, Global Market Trends
Unit 4	Future of FinTech in Financial Markets: Value Assessment of FinTech and Robo-Advising, Future Trends in Financial Markets
Unit 5	Trust in Financial Industry: Importance of Trust, Role of Cryptocurrency, Digital Signatures in Bitcoin, Blockchain and Hash Functions for Security
Unit 6	Impact of Technology on Financial Practices: Distributed Consensus Protocols, Proof of Work Mechanism, Role in Currency Stability
Unit 7	Components of Successful Financial Advisory: Cryptocurrency as an Asset Class, Role in Investment Portfolios
Unit 8	Future of Investing: Investment Trends, Managing Market Volatility, Decision-Making using Trust Mechanisms
Unit 9	Foundations of Payment Methods: Capital Asset Pricing Model (CAPM), Modern Portfolio Theory, Tangency Portfolio, Sharpe Ratio

Unit 10	Evolution of Credit Cards: Development of Credit Cards, Importance of Credit Scores in Investment Decisions
Unit 11	Two-Sided Payment Markets: Importance of Digital Signatures, Blockchain, Proof of Work in Cryptocurrency Systems
Unit 12	FinTech in Credit Card Markets: Evolution of Credit Card Systems, Two-Sided Markets, Payment Processing Issues, Regulations, FinTech Solutions
Unit 13	Financial Regulations: Regulatory Concerns and Innovations, Balance between Regulation and Innovation, Trade-offs
Unit 14	FinTech for Financial Business: Impact of the Great Recession of 2008, Emergence of FinTech as an Entrepreneurial Solution

Reference Books:

- Susanne Chishti and Janos Barberis, The FINTECH Book: The Financial Technology Handbook for Investors, Entrepreneurs and Visionaries
- Sanjay Phadke, Fintech Future: The Digital DNA of Finance
- Diane Maurice, Jack Freund, et al., Fintech: Growth and Deregulation

COURSE CODE-DITF407	**CRYPTOCURRENCY AND BLOCKCHAIN**

Course Description:
This course on Cryptocurrency and Blockchain provides an in-depth understanding of the underlying technologies and applications of cryptocurrencies and blockchain. Students will explore the mechanics of blockchain, its decentralized nature, and how it enables secure, transparent transactions without the need for intermediaries. The course covers key cryptocurrencies such as Bitcoin and Ethereum, examining their economic and social implications. Learners will also explore blockchain's potential beyond cryptocurrencies, including its applications in supply chain management, finance, and governance.

Course Objectives:
On completion of this course, learners will be able:

- to understand what Blockchain is and why it is used
- to be able to explain the different components involved within Blockchain
- to know when and why you may want to use Blockchain within your environment
- to master at a high-level what cryptocurrency is.

Course Contents:

Unit No.	Detailed Syllabus
Unit 1	History and Evolution of Blockchain: Concept of Cryptocurrency, Blockchain as an Innovative Currency System

Unit 2	Blockchain vs Enterprise Applications: Comparison of Blockchain with ERP Systems, Fundamental Building Blocks of Blockchain
Unit 3	Blockchain Technology Fundamentals: Core Technologies Required for Blockchain Implementation
Unit 4	Blockchain Technology Landscape: Concept of Currency, Digital Signatures, Blockchain Foundations, Risk Assessment of Cryptocurrencies
Unit 5	Blockchain Security: Privacy through Digital Signatures in Bitcoin, Role of Hash Functions, Security Mechanisms (Fabric Side DB)
Unit 6	Application of Blockchain in Supply Chain: Role of Blockchain in Supply Chain Management, Business and Societal Impact
Unit 7	Application of Blockchain in Manufacturing: Case-Based Applications in Manufacturing Sector
Unit 8	Application of Blockchain in Health and Public Services: Use Cases in Healthcare and Public Sector
Unit 9	Application of Blockchain in Financial Sector: Blockchain Use Cases in Finance and Banking
Unit 10	Blockchain in Government (I): Advantages, Use Cases, Digital Identity Systems
Unit 11	Blockchain in Government (II): Hyperledger Indy, Tax Payments, Land Registry Records
Unit 12	Overview of Cryptocurrency: Cryptocurrency as an Asset Class, Role in Investment Portfolios
Unit 13	Policy and Regulation of Cryptocurrency: Global Policies, Legal Aspects, Reasons for Bans, Impact on Valuation
Unit 14	Challenges in Blockchain Implementation: Regulatory Issues, Adoption Barriers, Public Acceptance Challenges

Reference Books:

- Don Tapscott and Alex Tapscott, Blockchain Revolution: How the Technology Behind Bitcoin and Other Cryptocurrencies is Changing the World
- Blockchain Architecture Design and Use Cases, Prof. Sandip Chakraborty & Dr. Praveen Jayachandran | IIT Kharagpur and IBM
- Antony Lewis, The Basics of Bitcoins and Blockchains
- Srihari Kapu, Blockchain Explained: A Pragmatic Approach

COURSE CODE: DITF 408	INFORMATION SYSTEMS MANAGEMENT

Course Description:

The course Management Information Systems (MIS) provides a comprehensive understanding of how information systems are designed, developed, and utilized to support business processes, decision-making, and organizational goals. Learners will explore the components and types of information systems, including Transaction Processing Systems (TPS), Management Information Systems (MIS), Decision Support Systems (DSS), and enterprise solutions like ERP, CRM, and SCM. The course emphasizes the architecture and design of information systems, organizational decision-making processes, and the role of emerging technologies such as AI, big data analytics, and cloud computing. Through practical insights, case studies, and discussions on system analysis and design (SAD) methodologies, learners will gain the skills necessary to evaluate, implement, and manage effective information systems in dynamic business environments. This course integrates theoretical concepts with real-world applications to prepare students for challenges in managing modern information systems.

Course Objectives:

On completion of this course, learners will be able to:

- Understand the fundamental concepts, components, and roles of information systems in organizational decision-making and business processes.
- Analyse different types of information systems, including TPS, MIS, DSS, and executive systems, and their applications in real-world scenarios.
- Apply systems thinking and design principles to develop and manage effective information systems and enterprise solutions.
- Evaluate the role of emerging technologies such as AI, cloud computing, big data, and IoT in enhancing organizational performance.
- Assess and improve business processes using tools like Business Process Reengineering (BPR) and Total Quality Management (TQM).

Course Contents:

Unit No.	Detailed Syllabus
Unit 1	Introduction to Information Systems: Role of data and information; Information systems and their importance; Overview of business processes.
Unit 2	Organizational Structures and Systems Approach: Types of organizational structures; Systems thinking and its application in MIS; Systems approach fundamentals.
Unit 3	Components and Resources of Information Systems: Hardware, software, people, data, and networks; Integration and automation of business functions.
Unit 4	Transaction Processing Systems (TPS): The concept of TPS; Role and significance of TPS; Examples and case studies of TPS in business operations.
Unit 5	Management Information Systems (MIS): The concept of MIS; Role and benefits of MIS; Case studies on how MIS supports organizational decision-making.

Unit 6	Expert Systems and Artificial Intelligence in MIS: Introduction to expert systems; Basics of AI in MIS; Real-world applications and examples.
Unit 7	Strategic and Executive Information Systems: Executive Support Systems; Strategic Information Systems; Role in achieving competitive advantage.
Unit 8	Decision-Making Process in Organizations: Programmed vs. non-programmed decisions; Role of MIS in decision-making; Concepts of decision-making processes.
Unit 9	Decision Support Systems (DSS): Components, models, and approaches of DSS; Use of DSS in business scenarios; Case studies.
Unit 10	Architecture and Design of Information Systems: Centralized and decentralized systems; IS architecture; Key factors for IS development and maintenance.
Unit 11	Enterprise Management Technologies: Introduction to ERP, CRM, SCM, and E-commerce; Integration of enterprise systems into business processes.
Unit 12	Business Process Reengineering and Total Quality Management: Principles of Business Process Reengineering (BPR); Total Quality Management (TQM) and its role in IS.
Unit 13	System Analysis and Design (SAD): System development life cycle (SDLC); Models and approaches of systems development; Tools used in SAD.
Unit 14	Information Systems: Risks and Value: Evaluating the value and risk of IS; Success and failure factors in IS implementation; Risk mitigation strategies.

Reference books:

- Management Information System: Text and Cases, 2020, by Waman S Jawadekar, Sanjiva Shankar Dubey
- Management Information Systems, Effy OZ, Thomson Leaning/Vikas Publications
- Laudon, K. C., & Laudon, J. P. (2024). Management information systems: Managing the digital firm (18th ed.). Pearson
- Bidgoli, H. (2024). Management information systems (11th ed.). Cengage Learning
- Schenk, B. (2024). Advanced management information systems: Models, concepts and cases. Springer

Operation Management

Course Code- DOMS405	**SERVICES OPERATIONS MANAGEMENT**

Course Introduction: This course on Services Operations Management focuses on the unique challenges and strategies involved in managing operations within service-based industries. Students will explore key concepts such as service quality, capacity planning, process design, and customer experience management. The course emphasizes optimizing service delivery, managing service supply chains, and using technology to enhance operational efficiency. Through case studies and practical exercises, learners will gain the skills to analyse and improve service processes, ensuring customer satisfaction and operational excellence in dynamic service environments.

Course Objectives:

- An overview of Service and Operations Management as a management function in general.
- Develop an understanding of the terminology and responsibilities that relate to Service Operations Management.
- Describe the function of the Service Operations Management discipline in various sectors of the economy through a case study.
- Interpret basic tools and skills used in solving problems traditionally associated with operating the service operations system.

Units No.	Details
Unit 1	Nature of Services and Classification: Meaning and Nature, Role of Services in the Nation's Economy, Evolution of the Service Sector, Drivers of Growth of the Service Sector, Classification of Services.
Unit 2	Service Strategy: Need for a Service Strategy, Need to Understand the Competitive Environment, Elements of Strategic Service Vision, Competitive Strategies for Service Organizations.
Unit 3	Service Design: Elements of the Service Design System, Role of Innovation in Services, New Service Development Cycle, Different Approaches Towards Service Delivery Design.
Unit 4	Human Resource Planning, People Management: Training, Empowering Employees, Motivation, Rewards, Effective Communication, Management of teams, Work Measurement Techniques.
Unit 5	Service Quality: Perspectives on Service Quality, Dimensions of Service Quality, The Gap Model of Service Quality, Service Quality Parameters, Quality Control and TQM Tools in Services.
Unit 6	Service Facility Location: Process of Location and Site Selection, Quantitative Models for Facility Location, Facility Layout, Objectives of a Service Facility Layout, Different Kinds of Service Facility Layouts.
Unit 7	Demand Forecasting: Forecasting Techniques: Qualitative Techniques, Quantitative Techniques, Errors in Demand Forecasting. Strategies for Managing Market Demand: Customer Segmentation, Offering Price Incentives, Overbooking
Unit 8	Challenges in Managing Service Capacity: Management of the Trade-Off Between Having Idle Capacity during Low Demand and Having Waiting Customers during High Demand, Strategies Used to Manage Service Capacity. Strategies to Increase Revenues for Service Organizations with a relatively fixed capacity.
Unit 9	Defining Scheduling: Loading, Sequencing. Concept of Scheduling in Services, Scheduling Workforce, Theory of Constraints.
Unit 10	Queuing Systems: Meaning: Structure of Queuing Systems. Characteristics of Queuing Systems.
Unit 11	Queuing Models: Single Server Queuing Model with Infinite Calling Population, Multi Server Queuing Model with Infinite Calling Population, Single Server Queuing Model with Finite Calling Population.
Unit 12	Defining Service Inventory: Role of Service Inventory, Types and Forms of Inventories in the Service Sector. Managing Inventory in Services Versus Managing Inventory in the Manufacturing Sector.

Unit 13	Service Supply Chain: Defining Supply Chain Management, Supply Chain in Services: Objectives and Activities of Service Supply Chain Management, Service Supply Chain Management Activities, Supply Chain Models.
Unit 14	Quantitative Models to Manage Service Operations: Data Envelopment Analysis: Advantages and Limitations of DEA, Basic DEA Models, Application of DEA Approach in Service Organizations.

Reference Book

- Robert Johnston, Michael Shulver, Nigel Slack, Graham Clark, *Service Operations Management: Improving Service Delivery* (2020)
- John McManus, Mats Winroth, Jannis Angelis, *Service Operations Management: A Strategic Perspective* (2023)
- J. K. Sharma, *Service Operations Management* (2021)
- K. Aswathappa, K. Shridhara Bhat, *Production and Operations Management* (2022 – includes service operations concepts)

Course Code- DOMS406	**TOTAL QUALITY MANAGEMENT**

Course Introduction: This course on Total Quality Management (TQM) provides an in-depth exploration of the principles, tools, and practices essential for achieving high-quality standards in an organization. Students will learn about the philosophy of continuous improvement, customer focus, and employee involvement. The course covers key TQM tools such as Six Sigma, quality function deployment (QFD), and process mapping, and emphasizes their application in different industries. Through real-world case studies, learners will develop the skills to implement TQM initiatives, measure performance, and foster a culture of excellence within organizations.

Course Objectives:

- Evaluate the principles of quality management and to explain how these principles can be applied within quality management systems.
- Identify the key aspects of the quality improvement cycle and to select and use appropriate tools and techniques for controlling, improving and measuring quality.
- Critically appraise the organizational, communication and teamwork requirements for effective quality management
- Critically analyse the strategic issues in quality management, including current issues and developments, and to devise and evaluate quality implementation plans

Units No.	Details
Unit 1	Quality as Strategy: Data Quality: data quality standards, data governance, Framework for Data Quality Management.

Unit 2	Quality Concept and Philosophy: Quality: Meaning & concept, Relationship of quality to Productivity, Costs, Cycle time, and value: Quality and Productivity. Historical development of Quality Management, Philosophies of different Quality Gurus.
Unit 3	The Six Sigma Concept: Concept and Meaning, Historical Development of Six Sigma, Six Sigma Methodology, Benefits of Six Sigma, Limitations of Six Sigma.
Unit 4	Quality Management Systems: Quality Management and Quality Management System (QMS), Reasons for Implementing a Quality Management System, Different Types of Quality Management Systems, designing a Quality Management System, Quality Management System Requirements to Achieve Consistent Quality
Unit 5	Strategic Quality Planning and Management: Quality and Strategic Management, Elements of Strategic Quality Management. Quality Planning and Strategies: Advantages and Goals, Stages, Characteristics of Action Plans, Execution of Action Plans. Role of Executive Leadership in Implementing Strategies and Goals: Obstacles to Achieving Planned Goals.
Unit 6	Quality Improvement: Methods for Improving Quality, Quality Terms and Standards. Problems Encountered in Quality Improvement: Need for Frequent Quality Improvement
Unit 7	Reliability: Meaning of Reliability, Types of Reliability, Requirements of Reliability, Reliability Theory, Predicting and Estimating Reliability, Measures of Reliability, Varying Degree of Reliability Required in Different Situations
Unit 8	Quality Cost and Schedule: Concept of Quality, Cost, and Schedule: Types of Quality Cost, Uses of Quality Cost. Initial costs study and Data Collection: Methods of Collecting Primary Data, Methods of Collecting Secondary Data, Cost Control Issues, and Implemented Risks.
Unit 9	Quality Control and Quality Assurance Audits: Quality Control and Assurance, Quality Audit and Assessments, Seven Quality Control Tools, Control Subjects for Quality, Preparing and Planning Audits, Basic Steps in Audit Reporting
Unit 10	Developing Quality Culture: Quality Culture and Corporate Culture, Theories which Motivated Quality Culture: Dimensions to Quality Culture, Approaches to Quality Culture, Models of Quality Culture. Why Quality Culture is Important: Challenges in Building a Quality Culture. Five Key Drivers for Quality Culture.
Unit 11	Designing for Quality: Quality and Functional Deployment, Key Issues with Design and Development as a Quality Process, Designing for Safety, Designing for Maintainability, Designing for Manufacturability, Designing for Reliability.
Unit 12	Quality in Manufacturing and Service Sectors: Models of Quality in Manufacturing and Service Sector, Three main criteria for self-control on quality, Overall review of manufacturing planning, Measurements in manufacturing operations, and service operations.
Unit 13	Quality Analysis and Tools: History and Concept of Quality Analysis and Tools, Seven New Tools and Techniques for Quality Analysis, Techniques used in Organizations to Monitor Quality Analysis, Concept of Benchmarking, Quality Function Deployment.
Unit 14	Total Quality Management: Concept, Elements of TQM, Benefits of TQM, Modern Management Framework for TQM, TQM –Stages, Success with TQM.

Reference Book

- David L. Goetsch, Stanley B. Davis, *Quality Management for Organizational Excellence* (2020)

- Sunil Luthra, Dixit Garg, Ashish Agarwal, Sachin K. Mangla, *Total Quality Management: Principles, Methods and Applications* (2024)
- Sunil Luthra, Dixit Garg, Ashish Agarwal, Sachin K. Mangla, *Total Quality Management (TQM)* (2020)
- S. K. Sharma, Savita Sharma, *Total Quality Management* (2021)

Course Code- DOMS407	**PRODUCTION, PLANNING, AND CONTROL**

Course Introduction: This course on Production, Planning, and Control (PPC) focuses on the strategies and techniques used to manage production processes efficiently. Students will explore topics such as demand forecasting, inventory management, capacity planning, scheduling, and resource optimization. The course emphasizes aligning production operations with market demand while minimizing costs and maximizing quality. Through practical exercises and case studies, learners will develop the skills to design and implement effective production plans, ensuring smooth operations and timely delivery in manufacturing and service industries.

Course Objectives:

- Recognize the objectives, functions, and applications of PPC and forecasting techniques.
- Explain different Inventory control techniques.
- Solve routing and scheduling problems
- Summarize various aggregate production planning techniques.

Units No.	**Details**
Unit 1	PPC concept: Classification of Production, Planning, and Control Functions, Types of Production systems: Batch-Job type-Mass, Aggregate & Master Production systems, Levels & Procedures in Production Planning & Control, Positioning of Planning-Control functions, Challenges in Production Planning & Control, Trends in Production Planning & Control
Unit 2	Advanced Planning and Scheduling: Concept of Advanced Planning and Scheduling, Advanced production & planning control for production systems, Advanced Planning

	optimizer, Sale Order-Production order planning, Challenges-advantages-disadvantages in advanced planning & scheduling, Industry 4.0 trends in advanced planning & scheduling in.
Unit 3	Functions and Tasks of Production Control: Concepts of control over production flow, Monitoring the production schedules, Directing - checking the course and progress of Work, Challenges - Functions and Tasks of Production Control, Industry Trends in the Functions and Tasks of Production Control.
Unit 4	Concept of Forecasting: Purpose of Sales Forecasting, Basic Elements of Forecasting, Importance of Forecasting, Objectives of Forecasting. Classification of Forecasting, Techniques of Forecasting.
Unit 5	Inventory Control with Known Demand: Aspects of Inventory Management and Control Process, Different Types of Inventory Controls, Advantages and Benefits of Inventory Control, Industry 4.0 Trends in Inventory Control with Known Demand.
Unit 6	Economic Order Quantity - Inventory Management: Inventory costs and their relationships, Classification of Inventory Models and the Deterministic Models, EOQ models - Bullwhip effect, Industry 4.0 trends Economic Order Quantity- Inventory Management
Unit 7	Operation Scheduling: Introduction, Different concepts of Operations scheduling, Purpose of Operations scheduling, Scheduling guidelines and constraints, Production planning and scheduling, and automation, Industry 4.0 trends in Operations Scheduling
Unit 8	Product mix problem and scheduling: Introduction, Concept of Product Mix Problems and Scheduling, Types of different scheduling methods/technology, Gantt charts, schedule boards, and computer graphics, Performance measures and priority rules for scheduling, Forward and backward scheduling, Industry 4.0 trends Product Mix Problems and Scheduling
Unit 9	Development in manufacturing technologies: Introduction, History of manufacturing technology, Concept of Development in Manufacturing Technologies, Different types of manufacturing techniques, Computer integrated manufacturing-CIM, Industry 4.0 trends in Manufacturing Technology.
Unit 10	Flexible Manufacturing System: Introduction, Concept of Flexible Manufacturing System, Productivity versus flexibility, Requirement of characteristic features for production, Benefits of Flexible Manufacturing System & analyse the global sequential Scenario of manufacturing, fundamentals of building blocks of a flexible system, Industry 4.0 trends in Flexible Manufacturing Systems.
Unit 11	Synchronous Manufacturing: Introduction, Concept of Synchronous Manufacturing, Symptoms of poor synchronization goals, Principles of synchronous manufacturing-Capacity Constrained Resources, Goldratt’s Theory of Constraints-Drum-Buffer-Rope technique in scheduling, Industry 4.0 trends in synchronous Manufacturing System
Unit 12	Quality Planning: Introduction, Concepts of Quality Planning, Aspects of Human resource in planning, Maintenance planning, Capacity Planning, Industry 4.0 trends in Quality Planning.
Unit 13	Production Distribution System Design: Introduction, Concept of Production Distribution System Design, Capacity Scheduling and aggregate capacity scheduling, Aggregation techniques and Disaggregation of the aggregate plan, Plant Location-Multiple Plant Production Facility Designs, Industry 4.0 trends in Production Distribution System Design.
Unit 14	Role of Production Planning in Supply Chain and Logistics: Introduction, Concept of Role of Production Planning in Supply Chain and Logistics, Effect of Production Planning in Supply Chain & Logistics, Concepts of Supply Chain Management, JIT -

	Just In Time, APO - Advanced Planning Optimizer, Industry 4.0 trends in Role of Production Planning in Supply Chain and Logistics.

Reference Book

- F. Robert Jacobs, William L. Berry, D. Clay Whybark, Thomas E. Vollmann, *Manufacturing Planning and Control for Supply Chain Management (3rd Edition)*, 2024
- Hubert Missbauer, Reha Uzsoy, *Production Planning with Capacitated Resources and Congestion*, 2020
- Jawad Akhtar, *Production Planning and Control with SAP ERP (2nd Edition)*, 2026
- J. Aatish Rao, *Production Planning and Control: Optimizing Productivity, Quality, and Flow in Manufacturing Technique*, 2025

Course Code-DOMS408	**ENTERPRISE RESOURCE PLANNING**

Course Introduction: This course on Enterprise Resource Planning (ERP) explores the role of integrated software systems in streamlining business processes across an organization. Students will learn how ERP systems connect various departments—such as finance, human resources, and supply chain—to improve data flow, decision-making, and operational efficiency. The course covers ERP system implementation, customization, and management, and focuses on understanding the strategic benefits of ERP in achieving business objectives. Through case studies and hands-on experience with ERP software, learners will gain practical knowledge of selecting, implementing, and managing ERP solutions in diverse organizational settings.

Course Objectives:

- To provide a contemporary and forward-looking perspective on the theory and practice of Enterprise Resource Planning Technology.
- To focus on a strong emphasis on the practice of theory in Applications and a practical-oriented approach.
- To train the students to develop a basic understanding of how ERP enriches the business organizations in achieving multidimensional growth.
- To aim at preparing the students technological competitive and make them ready to self-upgrade with the higher technical skills

Units No.	**Details**
Unit 1	Introduction of Enterprise Resource Planning: Definition of Enterprise Resource Planning, Evolution of Enterprise Resource Planning, Benefits of Enterprise Resource Planning, Advantages of Enterprise Resource Planning, Challenges of Enterprise

	Resource Planning, Limitations of Enterprise Resource Planning, Reasons for failure of Enterprise Resource Planning.
Unit 2	Overview of the role of enterprise: Characteristics of enterprise, Business Models of enterprise, Methods of Integration of enterprise, Overlapping of enterprise and Enterprise, Resource Planning, Limitations & challenges in enterprises, Trends in enterprises, and the role of enterprise.
Unit 3	Enterprise Resource Planning & related Technologies: Enterprise Resource Planning and Implementation types & methods, Correlation of Management information System-Decision Support System-Executive Information System, Correlation between Data Warehousing and Data Mining-Online Application Processing, Efficiency of Supply Chain Management, Effectiveness of Enterprise Resource Planning Systems, Trends of Enterprise Resource Planning in Industry 4.0 revolution.
Unit 4	Enterprise Resource Planning Tools and Software and Selection Methodology: Different types of ERP tools & their applications, Predictive Analytics in ERP with Machine Learning, Trends of ERP tools & selection in Industry 4.0 revolution.
Unit 5	Enterprise Resource Planning modules: Evolution & concept, Configuration of modules structure in Enterprise Resource Planning, Types, Functions, Features of Enterprise Resource Planning Modules, Business benefits & advantages of Enterprise Resource Planning Modules, Mandatory modules in an Enterprise Resource Planning: Trends of Enterprise Resource Planning types of Modules in Industry 4.0 revolution.
Unit 6	Enterprise Resource Planning–Manufacturing Perspective: techniques & technologies: Manufacturing perspective of Enterprise Resource Planning, Advantages of Enterprise Resource Planning in manufacturing, Types & Technologies of Enterprise Resource Planning in Manufacturing, LEAN aspects of Enterprise Resource Planning in manufacturing, Trends of Enterprise Resource Planning Manufacturing Modules in Industry 4.0 revolution.
Unit 7	Enterprise Resource Planning- Sales & Purchase Perspective: Mapping of Purchasing Activities through Enterprise Resource Planning, Flow of Sales Order to Production Order, Sub-Modules of Sales & Distribution Module, Limitations & Challenges in Sales & Distribution and Production Planning Modules, Industry 4.0 Trends in Sales & Distribution and Production Planning Modules.
Unit 8	Enterprise Resource Planning- Inventory Management Perspective: Mapping of Materials Management Activities in Enterprise Resource Planning, Advantages and Types of Inventory Management through Enterprise Resource Planning, Implementation & Transactions of Inventory Management in Web Enterprise Resource Planning, Industry 4.0 Trends in Inventory Management.
Unit 9	Enterprise Resource Planning– CRM perspective: Mapping of Customer Relationship Management Activities in Enterprise Resource Planning, Advantages of Customer Relationship Management in Enterprise Resource Planning, Types of Customer Relationship Management through Enterprise Resource Planning, Implementation & Transactions of Customer Relationship Management in Enterprise Resource Planning, Industry 4.0 Trends in Customer Relationship Management.
Unit 10	Overview of Enterprise Resource Planning – Human Resource & Finance Perspective: Mapping of Human Resource & Finance Management Activities in Enterprise Resource Planning, Types of Human Resource - Finance Management through Enterprise Resource Planning, Implementation & Transactions of Human Resource - Finance Management in Enterprise Resource Planning, Process of Transactions in Finance Management Environment, Industry 4.0 Trends in Human Resource - Finance Management 4.0 Revolution.

Unit 11	Pre-requisites for ERP Implementation Lifecycle: Construction and Development of Blueprint AS-IS and TO-BE, Implementation Strategies - Advantages - Disadvantages, Mapping under Big Bang Approach - Multiple Modules, Challenges while Implementing - Pre & Post Go Live Scenario, Industry 4.0 Trends in ERP Implementation.
Unit 12	Benefits of Enterprise Resource Planning: Overview of Advantages of ERP in an Organization, Direct & Indirect Benefits of ERP Implementation in an Organization, Collaboration of Functional Activities with ERP, Cost-Benefit-Risk Analysis of ERP Implementation, Overview of Failures in ERP Implementation, Industry 4.0 Trends and Advantage Options in ERP.
Unit 13	Overview of ERP Market: Collaboration of ERP Market with Industry Segments, ERP Market Driven Economy, Major ERP Players and their Market Share, Untapped Industry Potential in ERP Market, ERP Market Trends and Futuristic Options.
Unit 14	Overview of ERP Vendors, Consultants, and Users: Roles & Responsibilities of ERP Vendor - Consultant - End User, Differentiation between ERP Customization Version and Standard Packages, Pitfalls & Challenges while Selecting ERP Vendors - Consultants, Factors Influencing a Successful ERP Implementation, Industry 4.0 Trends and Technological Advancement in ERP.

Reference Book

- Ellen Monk, Bret Wagner, *Concepts in Enterprise Resource Planning*, 2026
- Siar Sarferaz, *Compendium on Enterprise Resource Planning: Market, Functional and Conceptual View based on SAP S/4HANA*, 2022
- Kushal Anjaria, *Sustainable Enterprise Resource Planning (S-ERP) for Industry 4.0: A Secure and Ethical Deployment Approach*, 2025
- Jawad Akhtar, *Production Planning and Control with SAP ERP*, 2026
- Alexis Leon, *Enterprise Resource Planning*, 2020
- Deepa Gupta, Mukul Gupta, Balamurugan Balusamy, Rajesh Kumar Dhanaraj, Parth Mukul Gupta, *Digital HR: Technologies for HR Transformation and Performance Improvement*, 2025

International Business

Course Code-DIBM405	**Title of the Course: Foreign Trade of India**

Course Description:
This course on Foreign Trade of India provides an in-depth understanding of the country's international trade dynamics, policies, and practices. Students will explore the historical evolution, current trends, and prospects of India's foreign trade, including key exports, imports, and trading partners. The course covers important aspects such as trade regulations, export-import procedures, trade agreements, and government initiatives like SEZs and FTPs. Through case studies and real-world examples, learners will gain insights into the challenges and opportunities in India's global trade environment, preparing them to navigate and contribute effectively to the country's international business landscape.

Course Objectives

On completion of this course, learners will be able to

- Understand the concepts, theories, and significance of international trade.
- Analyse the composition, direction, and trends of India's foreign trade.
- Examine India's foreign trade policies, export promotion measures, and institutional framework.
- Evaluate India's trade relations, regional trade agreements, and WTO-related issues.
- Assess the performance and challenges of India's external trade sector.

Course Contents:

Unit No.	**Details Syllabus**
Unit 1	Scope of International Trade: Importance of trade, the theories of absolute advantage, Comparative advantage and the Heckscher-Ohlin model, the significant gains and losses of international trade and the current status of world trade
Unit 2	India's Trade Performance: An Overview since 1950- Foreign trade of India since independence, composition of India's foreign trade, structural changes in imports, pattern of exports, the changing structure of exports and the direction of India's foreign trade
Unit 3	India's Trade Performance: 2000 Onwards- India's merchandise trade since 2000, the extent of India's trade and services trade, import of services.
Unit 4	India's Imports- Composition of India's imports, the trends of principal imports and imports through major ports of India.
Unit 5	India's Exports- India's exports from 2000 onwards, India's major manufactured exports, India's export composition, the need for export diversification and the exports through major ports.
Unit 6	India's Foreign Trade Policy and Its Evolution- EXIM policy (2002-07), India's foreign trade policy (2009-14), the trade policy measures taken under 2009-14, commodity specific measures for exports.
Unit 7	Institutional Framework for Export Promotion- Institutional set-up of various agencies for export promotion in India, service institutions and the government participation in foreign trade
Unit 8	Export Incentives and Benefits to Exporters- Market Access Initiative (MAI) scheme, Marketing Development Assistance (MDA) scheme, export promotion activities, measures under foreign trade policy 2009-14 and export incentives.
Unit 9	Special Economic Zones/Export Processing Zones/Free TradeZones/100 per cent EOUs- Special Economic Zones, amendments made to the SEZ Rules 2006, Free Trade Warehousing Zones (FTWZ) in India and the EOU scheme.
Unit 10	India's Trade with Major Markets- India's trade with major markets of the world including European Union (EU), Latin American and Caribbean Countries, Africa, ASEAN Nations, Middle East
Unit 11	Sectoral Performance of India's External Sector- Sectoral performance of India's external sector and the composition of India's foreign trade since independence.
Unit 12	Focus Markets and Focus Products Schemes- Focus markets and focus product schemes.

Unit 13	India and WTO: Agreements and Trade- WTO, basic principles and implications for business, intellectual property rights, WTO and dispute settlement, statistics of anti-dumping and coverage of Non-Tariff Barriers (NTBs) and Non-Tariff Measures (NTMs)
Unit 14	Foreign Trade Performance in the Context of RTAs- Structure of Regional Trade Agreements (RTAs), details of RTAs with different countries, major regional grouping and their members and the current engagements of India in RTA's.

Reference Book:

- Foreign Trade Policy and Handbook of Procedures 2023 – S.C. Jain, Shweta Jain & Abhishek Jain, Commercial Law Publishers, 2025.
- International Business: Text and Cases – Francis Cherunilam, PHI Learning, 2023.
- Foreign Trade Policy 2023 and Handbook of Procedures – Directorate General of Foreign Trade (DGFT), Ministry of Commerce & Industry, Government of India, 2023

Course Code-DIBM406	**Title of the Course: Global Logistics and SCM**

Course Description:

This course on Global Logistics and Supply Chain Management (SCM) provides a comprehensive understanding of the strategies, processes, and technologies that drive global supply chains. Students will explore the complexities of managing logistics across international borders, focusing on key areas such as transportation, inventory management, risk mitigation, and sustainability. The course emphasizes the integration of supply chain components to enhance efficiency, reduce costs, and create competitive advantages. Through case studies and real-world applications, learners will develop the skills to design and manage resilient supply chains in a dynamic global environment.

Course Objectives

On completion of this course, learners will be able to

- Understand the fundamental concepts and principles of global logistics and supply chain management.
- Analyse the complexities and challenges of managing supply chains in an international context.
- Evaluate various transportation modes, inventory strategies, and warehousing solutions.
- Apply risk management and sustainability practices in global supply chain operations.
- Develop strategic solutions to optimize supply chain performance and enhance organizational competitiveness.

Course Contents:

Unit No.	Details Syllabus
Unit 1	Global Trade Environment Structure: International Global Trade Environment, International Contracts and Legal Issues, Global Logistics Operator National and international logistics compared, Logistical Packaging.
Unit 2	Logistics and Global Supply Chain Management: Managing Logistics in the Dynamic World Market Concentration Production dispersion, Product line diversity, Strategic Approaches to Global Supply Chain Management, Coordinating Roles of Global Logistics in SCM, Market-accommodation flow, Global Supply Chain Collaboration
Unit 3	Logistics in Different Parts of the World: Cultural Differences and Impact on Logistics, Logistical Development in Different Countries, Factors influencing logistics, State of logistics in different countries, Trading Blocs
Unit 4	Transportation Infrastructure: Seaports, Airports, Canals, Tunnels and Bridges.
Unit 5	Ocean Ships and Shipping: Types of Cargo, Vessel, their Types and Characteristics, Shipbuilding.
Unit 6	Chartering Bulk Ocean Carriers: World's Bulk Shipping, Supply of Shipping, Charter Agreement for Shipping, The Charter Arrangement
Unit 7	The Ocean Liner Contract System Structure: Ocean Liner Conferences, Conference Members, Conferences and Competition, Conference Association with Shippers, Conference Association with Governments.
Unit 8	International Air Transportation: Aviation Development 8.3 Commercial Jet Aircrafts, Air Cargo Containers, Rate Making Factors affecting air freight rates, Cargo Documentation and Insurance.
Unit 9	Surface Transport: Movements to Port, Intermodal Transport, Advantages of intermodalism, Intermodal containers, Development of intermodal traffic, Intermodal carriers, Surface intermodal facilities, Air–ocean movements, Land Transportation in India, Road transportation in India, Rail transportation in India, Dry ports in India.
Unit 10	Global Logistics Functions and Intermediaries: Outbound Logistics Functions, Inbound Logistics Functions, Total Logistics Activities, Logistics Intermediaries.
Unit 11	Terms of Sale and Payment: Terms of Sale, Selling terms, Incoterms, Terms of Payment, Payment Methodology, Wire transfer, Money order, Automated Clearing House (ACH).
Unit 12	Documentation and Insurance: Documentation, Cargo Insurance, Hull Insurance, Air Shipment Insurance, Land Transport, Settlement of Insurance Claims.
Unit 13	Managing Logistics of Export Products: International Transaction Channel Activities, International Distribution Channel, Governing Bodies of Logistics and Trade, Hazardous Materials Transportation 13.6 Friction or Fraud in the Distribution Channel.
Unit 14	Global Sourcing: Why Source Internationally, designing a Global Sourcing System, Global Sourcing and Procurement, Planning, Specification, Evaluation, Relationship management, Transportation and inventory holding costs, Implementation, Monitoring and Improving, Issues in Importing and Exporting.

Reference Book:

- Supply Chain Management: Strategy, Planning and Operation – Sunil Chopra, Pearson, 8th Edition, 2023
- Sustainable Logistics and Supply Chain Management – Grant, Wong & Trautrims, Kogan Page, 3rd Edition, 2024.

Course Code-DIBM407	**Title of the Course: International Business Environment and International Law**

Course Description:
This course on International Business Environment and International Law provides a comprehensive understanding of the global factors and legal frameworks that influence international business operations. Students will explore key elements such as economic systems, political and cultural environments, and international trade policies that shape global markets. The course delves into essential aspects of international law, including trade regulations, contracts, intellectual property rights, and dispute resolution. Through case studies and practical insights, learners will gain the skills to navigate complex international environments, ensuring compliance and strategic decision-making in cross-border business activities.

Course Objectives

On completion of this course, learners will be able to

- Analyze the increasing globalization of economy and business
- Explain the various aspects of business environment and strategic decisions in international business
- Explain the notion of harmonized sales law
- Describe the regulation and promotion of foreign trade in India
- Discuss the concept of Labor Rights and Free Trade Agreements
- Discuss Import-Export laws and export cartels

Course Contents:

Unit No.	**Details Syllabus**
Unit 1	Introduction to International Business Environment: Introduction, Nature of International Business Environment, Importance of International Business Environment, Scope of International Environment, International Business Corporations, International Business Management orientations
Unit 2	Framework for Analysing International Business: Introduction, the Geographical Environment, the Economic Environment, Socio-Cultural Environment, Political Environment, Legal Environment

Unit 3	International Economic Environment: Introduction, World Economic and Trading Situation, International Economic Institutions and Agreements, Generalized System of preference (GSP), International commodities agreements
Unit 4	Economic Laws in India: Introduction, Information Technology Act, Foreign Exchange Management Act, Competition Act, Negotiable Instruments Act, Consumer protection Laws, Securities Exchange Board of India
Unit 5	Foreign Investment: Introduction, Capital and Investment flows, Trade and investment barriers in India, Foreign Direct Investment, Foreign Institutional Investors
Unit 6	International Negotiations: Introduction, Introduction to International negotiations, Process of International Negotiations, Styles of negotiations, Cognitive barriers to negotiations, Breach and remedies
Unit 7	Legal Framework of International Business: Introduction, Nature and complexities, code and common laws, international business contracts, Payment terms, international sales agreements, Rights and duties of agents and distributors
Unit 8	Law of Contract: Introduction, Introduction to law of contract, Essential elements of a valid contract
Unit 9	Corporate Law: Introduction, Overview of corporate law, Promotion and incorporation of a company, Memorandum of association, article of association, Winding up of a company, Corporate Governance
Unit 10	Law of sale of goods: Introduction, Overview of Law of Sale of goods, Factors affecting law of sale of goods, performance of contract of sales
Unit 11	International Trade and Finance: Introduction, Payment terms in Foreign Trade, Documentation in International Trade, Export Import Policy and Procedures, Export Import Finance, Documentation in International Trade, Payment terms in Foreign Trade
Unit 12	Regulatory Framework of WTO: Introduction, Charter and principles of GATT/WTO, GATT/WTO provisions relating to preferential treatment of developing countries, Non-Tariff Barriers, Implication of WTO to important sectors
Unit 13	Regulation and Treaties: Introduction, Licensing, Franchising, Joint ventures, Patents and Trademarks, Technology transfers, Framework relating to E-commerce.
Unit 14	Regulatory framework and Taxation: Introduction, E-Commerce, cross border transactions and online financial safeguards, legal safeguards, international taxation, Sharing of Tax revenues.

Reference Book:

- International Business: Environment and Operations – Daniels, Radebaugh & Sullivan, Pearson, 17th Edition, 2022
- International Business Law and the Legal Environment: A Transactional Approach – Larry A. DiMatteo, Routledge, 5th Edition, 2025.
- Economic and Social Survey of Asia and the Pacific – United Nations Publications, 2024.

Course Code-DIBM408	Title of the Course: Export-Import Finance

Course Description:
This course on Export-Import Finance provides a comprehensive understanding of the financial mechanisms and instruments involved in international trade. Students will explore key concepts such as trade financing methods, payment terms, letters of credit, export credit insurance, and foreign exchange management. The course covers the role of banks, financial institutions, and government agencies in facilitating trade finance. Through practical case studies and real-world applications, learners will develop the skills to assess financial risks, manage cash flows, and ensure compliance with international financial regulations. This course prepares participants to effectively manage financial aspects of export-import operations in a dynamic global market.

Course Objectives

On completion of this course, learners will be able to:

- Analyze the institutional frameworks for exports
- Describe the operations involved for factoring and forfeiting
- Evaluate the regulatory framework of institutions for import financing
- Describe the functioning of exchange rate policy in India
- Describe the techniques involved in managing risk

Course Contents:

Unit No.	Details Syllabus
Unit 1	Framework of Export and Import Finance- Importance of exports, institutional framework for exports, assistance given by commercial banks to export and import, role of RBI and EXIM bank in the promotion of exports and imports in India.
Unit 2	Pre Shipment Finance Scheme - Need for export finance, export financing facilities, pre-shipment finance for exports, mechanism of disbursal of pre shipment finance and special cases of pre shipment finance.
Unit 3	Post Shipment Finance Scheme- Need for post shipment finance, interest rates on post shipment export credit and the mechanism of disbursal of post shipment finance and interest subvention for priority sectors
Unit 4	EXIM Bank: Finance Schemes- Role of EXIM Bank, acts and regulations of the EXIM Bank and its various trade financing schemes.
Unit 5	Export and Import: Factoring and Forfeiting- Factoring and forfeiting services and contract.

Unit 6	Export Credit Guarantee Corporation–Policies and Guarantees for Export-Functions of ECGC; need for credit insurance, risks covered under ECGC policies, credit insurance policies of ECGC and guarantees given to banks.
Unit 7	Methods and Instruments of International Payment - key considerations in choosing an international payment mode, payment options for exporters, new mechanisms in international payment settlement and methods of international money transfer.
Unit 8	Letter of Credit and Implications of UCP 600- Process, functions, characteristics, cost and types of Letter of Credit, implications of UCP-600.
Unit 9	Import Financing Schemes- Regulatory framework, exchange control regulations and the methods of import finance.
Unit 10	Exchange Rate Policies and Regulations- Basics of Exchange rate policy, regulations, functioning and determinants of exchange rate.
Unit 11	Foreign Currency Exchange Risk Management and Control- Foreign exchange exposure, risks that arise due to currency fluctuations, Management of exposure and risk.
Unit 12	Foreign Exchange and Exchange Rates- Forex market, participants in foreign exchange market, trading characteristics of foreign exchange, factors affecting foreign exchange rates and the financial instruments used in foreign exchange.
Unit 13	FEMA and FEDAI Guidelines- Objectives and characteristics of FEMA, evolution and need of FEMA, role of FEDAI in foreign exchange and FEDAI rules and regulations.
Unit 14	Taxation for Exporters and Importers- Taxes levied on importers and exporters, duty exemption schemes for exporters and duty remission schemes for exporters.

Reference Book:

- International Financial Management, P. G. Apte & Sanjeevan Kapshe (8th ed.), McGraw Hill Education (2020)
- Multinational Financial Management, Alan C. Shapiro, Paul Hanouna & Atulya Sarin (12th ed.), John Wiley & Sons (2024).
- Foreign Exchange and Risk Management – C. Jeevanandam, Sultan Chand & Sons, 2020.

Information System Management

Course Code: DISM 405	**INFORMATION SYSTEMS MANAGEMENT**

Course Description

The course Management Information Systems (MIS) provides a comprehensive understanding of how information systems are designed, developed, and utilized to support business processes, decision-making, and organizational goals. Learners will explore the components and types of information systems, including Transaction Processing Systems (TPS), Management Information Systems (MIS), Decision Support Systems (DSS), and enterprise solutions like ERP, CRM, and SCM. The course emphasizes the architecture and design of information systems, organizational decision-making processes, and the role of emerging technologies such as AI, big data analytics, and cloud computing. Through practical insights, case studies, and discussions on system analysis and design (SAD) methodologies, learners will gain the skills necessary to evaluate, implement, and manage effective information systems in dynamic business environments. This course integrates theoretical concepts with real-world applications to prepare students for challenges in managing modern information systems.

Course Objectives

- Understand the fundamental concepts, components, and roles of information systems in organizational decision-making and business processes.
- Analyse different types of information systems, including TPS, MIS, DSS, and executive systems, and their applications in real-world scenarios.
- Apply systems thinking and design principles to develop and manage effective information systems and enterprise solutions.
- Evaluate the role of emerging technologies such as AI, cloud computing, big data, and IoT in enhancing organizational performance.
- Assess and improve business processes using tools like Business Process Reengineering (BPR) and Total Quality Management (TQM).

Course Contents:

Unit No.	**Details Syllabus**
Unit 1	**Introduction to Information Systems:** Role of data and information; Information systems and their importance; Overview of business processes.
Unit 2	**Organizational Structures and Systems Approach:** Types of organizational structures; Systems thinking and its application in MIS; Systems approach fundamentals.
Unit 3	**Components and Resources of Information Systems:** Hardware, software, people, data, and networks; Integration and automation of business functions.
Unit 4	**Transaction Processing Systems (TPS):** The concept of TPS; Role and significance of TPS; Examples and case studies of TPS in business operations.
Unit 5	**Management Information Systems (MIS):** The concept of MIS; Role and benefits of MIS; Case studies on how MIS supports organizational decision-making.
Unit 6	**Expert Systems and Artificial Intelligence in MIS**: Introduction to expert systems; Basics of AI in MIS; Real-world applications and examples.
Unit 7	**Strategic and Executive Information Systems:** Executive Support Systems; Strategic Information Systems; Role in achieving competitive advantage.
Unit 8	**Decision-Making Process in Organizations:** Programmed vs. non-programmed decisions; Role of MIS in decision-making; Concepts of decision-making processes.
Unit 9	**Decision Support Systems (DSS):** Components, models, and approaches of DSS; Use of DSS in business scenarios; Case studies.
Unit 10	**Architecture and Design of Information Systems:** Centralized and decentralized systems; IS architecture; Key factors for IS development and maintenance.
Unit 11	**Enterprise Management Technologies:** introduction to ERP, CRM, SCM, and E-commerce; Integration of enterprise systems into business processes.

Unit 12	**Business Process Reengineering and Total Quality Management:** Principles of Business Process Reengineering (BPR); Total Quality Management (TQM) and its role in IS.
Unit 13	**System Analysis and Design (SAD):** System development life cycle (SDLC); Models and approaches of systems development; Tools used in SAD.
Unit 14	**Information Systems: Risks and Value:** Evaluating the value and risk of IS; Success and failure factors in IS implementation; Risk mitigation strategies.

References books:

- Management Information System: Text and Cases, 2020, by Waman S Jawadekar, Sanjiva Shankar Dubey
- Management Information Systems, Effy OZ, Thomson Leaning/Vikas Publications
- Laudon, K. C., & Laudon, J. P. (2024). Management information systems: Managing the digital firm (18th ed.). Pearson
- Bidgoli, H. (2024). Management information systems (11th ed.). Cengage Learning
- Schenk, B. (2024). Advanced management information systems: Models, concepts and cases. Springer

Course Code- DISM 406	**E-COMMERCE**

Course introduction: This course on E-Commerce provides an in-depth understanding of the digital marketplace, exploring the strategies, technologies, and models that drive online businesses. Students will learn about various e-commerce business models, digital payment systems, online marketing, and customer behavior in the digital age. The course emphasizes practical knowledge, focusing on tools and platforms used to launch and manage successful online businesses. Through case studies and hands-on projects, learners will gain insights into building effective e-commerce strategies, managing logistics, and ensuring secure online transactions in a rapidly evolving market.

Course Objectives:

- Understand the different types of e-commerce models (B2B, B2C, C2C, etc.) and their applications.
- Develop strategies for digital marketing, customer acquisition, and engagement in an e-commerce setting.
- Analyze the role of payment systems, security protocols, and regulatory frameworks in online transactions.
- Apply tools and technologies to manage e-commerce platforms, inventory, and supply chains.
- Evaluate the impact of e-commerce trends on consumer behavior, business operations, and competitive advantage.

Unit No.	Details Syllabus

Unit 1	Introduction to e-Commerce: Overview of e-commerce, E-commerce Framework, Anatomy of E-commerce Applications, Role of Media Convergence in E-commerce
Unit 2	Evolution of e-Commerce: History and Growth of E-commerce, Advantages and Disadvantages, E-commerce in India, Opportunities in Indian Industries, Challenges in E-transactions
Unit 3	Network Infrastructure: Internet Hierarchy, Building Blocks of E-commerce, Network Layers, TCP/IP Protocols, Advantages of Internet in E-commerce
Unit 4	e-Commerce Infrastructure: Computer and Web Server Hardware, Server Software, Types of E-commerce Software
Unit 5	Managing the e-Enterprise: E-business Enterprise Concepts, Comparison with Traditional Organisations, Role of Organisations in E-enterprise
Unit 6	e-Commerce Process Models: Business Models, Relationship-based E-business Models, E-commerce Sales Life Cycle (ESLC)
Unit 7	Risks of Insecure Systems: Risks in Online Transactions, Customer Risks (Fraud, Data Theft), Agent Risks, Business Transaction Risks
Unit 8	Management of Risk: Risk Management Components, Disaster Recovery Plans, Risk Assessment and Control Mechanisms
Unit 9	Electronic Payment Systems: Types of Payment Systems, E-cash, Smart Cards, Credit Cards, Security and Privacy Issues
Unit 10	Electronic Data Interchange (EDI): History, Implementation Challenges, Working of EDI, Relationship with Internet
Unit 11	e-Marketing: Scope of Online Marketing, 4Ps of Internet Marketing, Digital Marketing Techniques
Unit 12	Website Design Issues: Website Design Process, Goal Setting, Budgeting, Development Strategies
Unit 13	Consumer-Oriented Business: Customer Markets, One-to-One Marketing, Consumer Demographics, Customer Loyalty, Search Engines, Online Catalogues
Unit 14	Management Challenges and Opportunities: New Business Models, Process Changes, Channel Conflicts, Legal and Regulatory Environment, Security and Privacy Issues

Reference Book :

- Laudon, K. C., & Traver, C. G. (2021). *E-commerce: Business, technology, society* (16th ed.). Pearson.
- Chaffey, D., & Ellis-Chadwick, F. (2019). *Digital marketing: Strategy, implementation, and practice* (7th ed.). Pearson.
- Schneider, G. P. (2017). *Electronic commerce* (12th ed.). Cengage Learning.
- Turban, E., King, D., Lee, J. K., Liang, T. P., & Turban, D. C. (2018). *Electronic commerce: A managerial and social networks perspective* (9th ed.). Springer.
- B2B E-Commerce - Business Models, Strategies, and Tools. (2018). *Harvard Business Review Press.*

Course Code-DISM407	COMPUTER NETWORKS

Course Introduction: This course on Computer Networks provides a comprehensive understanding of the principles, architectures, and protocols that govern modern communication systems. Students will explore key concepts such as network topologies, the OSI and TCP/IP models, data transmission, and network security. The course covers wired and wireless networking, routing and switching, and emerging technologies like cloud networking and IoT. Through practical exercises and simulations, learners will gain hands-on experience in designing, configuring, and troubleshooting networks. This course equips participants with the foundational knowledge and skills needed to build and manage efficient, secure, and scalable network infrastructures.

Course Objectives:

After studying this subject, the student should be able to:

- Discuss about the basics of computer networks
- List the hardware and software components of a computer network
- Explain the different types of computer network
- Describe data communication and transmission
- Discuss the concept of data link control

Unit No.	Details Syllabus
Unit 1	**Introduction to Computer Networks:** Introduction, Evolution of Computer Networks, Components of Computer Networks, Types of Computer Networks
Unit 2	**Reference Models:** Introduction, OSI Reference Model, TCP/IP Reference Model
Unit 3	**Data Communications:** Introduction, Data Communication System, Network Connections, Communication Media, Fourier Analysis
Unit 4	**Data Transmission and Data Compression:** Introduction, Transmission Modes, Data Communication Interfacing, Multiplexing, Types of Data Compression
Unit 5	**Link Control and Protocol Concept:** Introduction, Error Detection and Error Correction, Functions of Data Link Control, Protocols and Standards, High-Level Data Link Control
Unit 6	**Communication Satellites:** Introduction, Communication Satellites, Geostationary Satellites, Medium-Earth Orbit Satellites, Low-Earth Orbit Satellites, Highly Elliptical Orbit, Satellites versus Fibre
Unit 7	**Network Standardization:** Introduction, Key Organisations in Telecommunications, International Standards Bodies, Internet Standards Organisations, Advantages and Disadvantages of Standards
Unit 8	**Network Topologies and Networking Devices:** Introduction, Network Topologies, Computer Networking Devices, Differences between Networking Devices

Unit 9	**Integrated Services Digital Network (ISDN)**: Introduction, Network Architecture, ISDN Rate Interface, ISDN Reference Points, ISDN Protocol Architecture, Signalling, Applications of ISDN
Unit 10	**Protocols and Service Providers:** Introduction, Internet Protocols, Importance of Internet Protocol, Internet Service Providers (ISPs), Challenges for ISPs
Unit 11	**Data Link Layer:** Introduction, Data Link Layer Design, Types of Errors, Error Detection, Error Correction, Data Link Protocols
Unit 12	**MAC Sub-layer:** Introduction, Channel Allocation, Multiple Access Protocols, Ethernet, Wireless LANs, Broadband Wireless, Bluetooth
Unit 13	**Network and Transport Layer:** Introduction, Network Layer Design, Algorithms, Internetworking, Transport Layer Services, Elements of Transport Protocols, Internet Transport Protocols
Unit 14	**Network Layer in Internet:** Introduction, Internet Protocol (IP), Internet Protocol Addressing, Internet Control Protocols, Mobile IP

Reference Books:

1. Tanenbaum, A. S., & Wetherall, D. J. (2021). *Computer networks* (6th ed.). Pearson
2. Kurose, J. F., & Ross, K. W. (2022). *Computer networking: A top-down approach* (8th ed.). Pearson
3. Forouzan, B. A. (2017). *Data communications and networking* (5th ed.). McGraw-Hill Education
4. Stallings, W. (2020). *Data and computer communications* (11th ed.). Pearson
5. Peterson, L. L., & Davie, B. S. (2021). *Computer networks: A systems approach* (6th ed.). Morgan Kaufmann

Course Code- DISM408	**JAVA AND WEB DESIGN**

Course introduction: This course on Java and Web Design introduces students to the fundamentals of Java programming and its application in web development. Students will learn core Java concepts such as object-oriented programming (OOP), data structures, and exception handling, along with the creation of dynamic web applications using Java technologies. The course covers HTML, CSS, and JavaScript for front-end design, and frameworks like JSP and Servlets for back-end development. Through practical projects, learners will gain hands-on experience in building interactive, responsive websites and web applications, preparing them for careers in software and web development.

Course Objectives:
After studying this subject, the student should be able to:

- Explain the concept of World Wide Web

- Discuss the working of Web browsers
- Describe the history of the Java programming language
- Design an effective Web site
- Create Web pages using HTML
- Describe CSS, DHTML, Javascript and XML

Unit No.	Details Syllabus
Unit 1	Introduction to Java and Web Design: Introduction, World Wide Web, Web Browsers, Web Page, Introduction to Java and its Web Applications, Search Engines
Unit 2	Basic Web Page Development: HTML Basics – Creating HTML Documents, Building a Web Page, Text and Image Formatting, Adding Links, Web Development Tools
Unit 3	Web Page Development with HTML: HTML Table Structure, Basic Table Tags, Formatting Tables, Multimedia on Web Pages, Forms, Formatted Lists, Frames
Unit 4	Using CSS for Web Designing: Introduction to CSS, Benefits of CSS, Working with CSS, Text Formatting, Colours, Positioning Elements, Page Layout
Unit 5	Web Servers: Basics of Web Servers, Introduction to Apache HTTP Server, Installation, Virtual Hosts, Log File Monitoring, Security, Server Errors, Performance
Unit 6	Using JavaScript: Overview of JavaScript, Using JavaScript in Web Pages, Event Handlers, Benefits and Drawbacks
Unit 7	Script Languages for Web Development: Overview of Scripting Languages, Comparison with Programming Languages, Perl (Features and Benefits), PHP (Features, Benefits, Drawbacks), Python
Unit 8	The LAMP Stack: Overview and Origin of LAMP Stack, Benefits and Drawbacks, Installation and Usage, Managing with phpMyAdmin
Unit 9	Search Engines: Overview and Working of Search Engines, Techniques for Higher Website Ranking
Unit 10	Web Design Tools: Web Design Tools, HTML Editors, Adobe Photoshop, Adobe Flash (archived), Firebug (archived)
Unit 11	Java Basics: Features of Java, Working with Java, Java Classes, Control Statements, Example – Prime Number Program
Unit 12	Classes and Objects: OOP Concepts, Advantages and Disadvantages, Applications, Object-Oriented Development in Java, Methods, Inheritance, Interfaces, Inner Classes
Unit 13	Core Java API: Introduction to API, Java Development Kit (JDK), Exception Handling, Threads, Swing Packages
Unit 14	Servlets and JSP: Overview, Servlet Life Cycle, Comparison with Script Languages, Handling Requests and Responses, JSP Usage

References book:

1. Deitel, P., & Deitel, H. (2023). *Java: How to program* (12th ed.). Pearson
2. Schildt, H. (2022). *Java: The complete reference* (12th ed.). McGraw-Hill Education

3. Murach, J., & Urban, M. (2021). *Murach's Java programming* (6th ed.). Murach Books
4. Duckett, J. (2022). *HTML and CSS: Design and build websites* (2nd ed.). Wiley
5. Freeman, E., Robson, E., Sierra, K., & Bates, B. (2022). *Head first Java* (3rd ed.). O'Reilly Media

Project management

Course Code: DPRM405	**Quantitative Methods in Project Management**

Course Description
This course provides a comprehensive understanding of quantitative techniques used in project management for planning, scheduling, resource allocation, and decision-making. It focuses on mathematical modelling, statistical tools, network analysis, forecasting methods, and optimization techniques to support effective project execution. The course also integrates software applications such as MS Project and relevant analytical tools to enhance practical decision-making in project environments.
Course Objectives
On completion of this course, learners will be able to:

- Understand and apply quantitative tools for project planning and control
- Develop analytical and problem-solving skills for project optimization
- Use statistical and forecasting techniques for project decision-making
- Apply scheduling and resource allocation methods for effective project execution.

Course Contents:

Unit No.	Details Syllabus
Unit 1	**Basics Concepts in Project Management**: Introduction to Project Management, Meaning and Definition of a Project, Characteristics of a Project, Objectives of Project Management, Classification of Projects, Project Selection Methods, Decision Tree Analysis
Unit 2	**Network Analysis**: Project Life Cycle, Phases of Project Life Cycle, Project Network, Arranging Activities as per Precedence, Components of Project Network, Steps in Network Design, Minimum Spanning Tree in Operations Research, Shortest Route Problem in Operations Research, Maximal Flow Problems in Operations Research
Unit 3	**Project Scheduling by PERT/CPM:** CPM/PERT Network Components, Rules in Constructing a Network, Procedure for Numbering the Events using Fulkerson's Rule, Critical Path Method, Time Estimates: Earliest Time and Latest Time, Project Evaluation Review Technique (PERT).
Unit 4	**Time Cost Optimization in Network Scheduling**: Brief History, Project Cost, Time-Cost Optimization Algorithm, Linear Programming Problems, Formulation of Linear Programming Problems.
Unit 5	**Resource Allocation in Network Scheduling**: Components of Resource Analysis in Network Scheduling, Challenges and Application of Resource Analysis, Key

	Components, Applications and Benefits of Management Operation System Technique (MOST), Challenges, Future Trends and Innovation in Management Operation System Technique (MOST), GERT and its Key Components, Challenges and Limitations in Implementing GERT, Application, Benefits and Challenges of Precedence Planning, Line of Balance
Unit 6	**Business Forecasting: Part-01**-Introduction of Business Forecasting, Importance of Business Forecasting, Time Series Analysis, Business Forecasting Techniques, Importance of Forecasting in Business?, Time Series Forecasting, Time Series Forecasting Considerations, Classical Multiplicative Time-Series Model, Method of Least Square.
Unit 7	**Business Forecasting: Part-02**- Definition and Importance of Forecasting in Business, Overview of Forecasting Techniques and Their Applications, Benefits of Accurate Forecasting, Challenges in Forecasting, Types of Business Forecasting, Key Concepts in Time Series Analysis, Introduction to Trend-Fitting and Forecasting, Modelling for Trend-Fitting and Forecasting, Fitting AR Models to Data, Choosing an Appropriate Forecasting Model, Time Series Forecasting of Seasonal Data, Comparing Different Forecasting Models, Integrating Forecasting into Business Decision-Making, Real-Time Forecasting and Its Impact on Business Operations
Unit 8	**Budgeting**:Budgeting in Project Management, Costing in Project Management, Steps of Project Budgeting and Costing, Impact of Costing on Budgeting, Concept of Earned Values, Earned Value Terminology, Fundamentals of Earned Value, Earned Value Steps, Uses of Earned Value, Drawbacks of Earned Value, Variances under Earned Value, Forecasting Cost of Project Completion
Unit 9	**MS Project**: Understanding Project and Project Management, Introducing Project 2019, Navigating Ribbon Tabs and the Ribbon, Creating a Project Charter, Starting a Project, Weighing Scheduling versus Automatic Scheduling, Importing Tasks from Outlook, Inserting Hyperlinks, Inserting One Project into Another, Saving the Project.
Unit 10	**Task Entry and Linking in MS Project**: Creating Summary Tasks and Subtasks, The Project Summary Task, Moving Tasks up, Down, and All Around, Expanding the Task Outline, Setting Milestones, Deleting Tasks and Using Inactive Tasks, Making a Task Note
Unit 11	**Resources Management in MS Project**: Resources: People, Place and Things, Understanding Resources, Resource Types: Work, Material and Cost, How Resources Affect Task Timing, Estimating Resource Requirements, The Birth of a Resource, Identifying Resources Before You Know Their Names, Many Hands Make Light Work, Managing Resource Availability, Estimating and Setting Availability, When a Resource Comes and Goes, Sharing Resources, Importing Resources from Outlook, Assigning Resources, Making a Useful Assignation, Selecting Resources from the Resource Column, Using the Assign Resources Dialog Box, Adding Assignments in the Task Information Dialog Box
Unit 12	**Displaying of Data and Examining Cost Factor in MS Project**: How Do Costs Accrue?, When Will This Hit the Bottom Line?, Specifying Cost Information in the Project, Entering Hourly, Overtime, and Cost-per-use Rates, Assigning Material Resources, How Your Settings Affect Your Costs?, Everything Filters to the Bottom Line, Setting Predefined Filters, Putting Auto Filter to Work
Unit 13	**Printing and Reporting in MS Project-** Generating Standard Reports, Creating New Report, Gaining a New Perspective on Data with Visual Reports, Creating a

	Visual Report, Fine Tuning a Report, Dragging, Dropping and Sizing, Spiffing Things Up, Working with Printer and Page Setup, Inserting Headers and Footers, Working with a Legend, Getting Preview, Printing at Last!, Working on the Timelines, Customizing the Timelines, Copying the Timeline
Unit 14	**Updating a Project in MS Project and Managing Multiple in MS Project -** Baseline vs. Actual Progress, Displaying Progress Lines, Formatting Progress Lines, Delving into the Detail, Tracking Progress Using Earned Value Management, An Abundance of Critical Paths, It's About Time and Applying Contingency Reserve, Working with Risk, Completing a Task in Less Time, Cutting to the Chase: Deleting Tasks, The Resource Recourse, Deleting or Modifying a Resource Assignment, Beating Overallocations with Quick-and-Dirty Rescheduling, Levelling Resources, Rescheduling the Project, Understanding Multi-Project Management, Consolidating Projects in MS Project, Tracking More than One: Consolidated Projects, Using the Organizer in MS Project

Reference Books

- Taha, H. A., *Operations Research: An Introduction*, Pearson
- Render, B., Stair, R., & Hanna, M., *Quantitative Analysis for Management*, Pearson
- PMBOK Guide, *Project Management Institute (PMI)*
- Levin & Rubin, *Statistics for Management*, Pearson

Course Code: DPRM406	**PROJECT RISK MANAGEMENT**

Course Description:

This course introduces the principles and practices of project risk management with a focus on identifying, analyzing, evaluating, and responding to risks throughout the project lifecycle. It covers qualitative and quantitative risk analysis, risk response strategies, risk monitoring, and control techniques. The course also integrates contemporary risk practices aligned with PMBOK standards and industry applications including Industry 4.0 risk considerations.

Course Objectives:

On completion of this course, learners will be able to:

- Understanding of risk identification and assessment techniques
- Enable learners to perform qualitative and quantitative risk analysis
- Design effective risk response and mitigation strategies
- Apply risk monitoring and control tools in real-world projects.

Course Contents:

Unit No.	Details Syllabus
Unit 1	**Understanding Risk Management in Projects**: Definition and Aspects of Risk Management, Need, Necessity and Concepts of Risk Management in Project

	Management, Risk Management Process in Project Management, Creating a Risk Management Plan, Risk Management Responsibilities, Industry 4.0 Trends in Risk Management of Project Management, Concept Map
Unit 2	**Identifying Risk in Projects-** Concept of Identification of Risk in Projects, Methods of Risk Identification and Categories of Risk in Projects, RBS – Risk Breakdown Structure Concept, RBS – Uses and Benefits of RBS, Trends in Identifying Risk in Projects
Unit 3	**Organizing for Risk Management:** Concept of Organizing for Risk Management, Risk Management in the TQM Framework, Good Manufacturing Practices, Benchmarking, Process Maturity Model, Analysis of Project Constraints, Scope Options and Opportunity Management, Risk Impact, PERIL Database
Unit 4	**Key Project Risk Management Processes as per PMBOK**: PMBOK – Concepts of Project Risk Management Processes, Overview of Project Risk Management Process, Risk Management Planning, Detailing of Risk Identification, Qualitative Risk Analysis, Quantitative Risk Analysis, Risk Response Planning, Monitor and Control Risks
Unit 5	**Risk Analysis and Assessment**: Concepts of Risk Analysis and Steps in Risk Analysis, Risk Assessment – Assessment Cycle, Quantitative and Qualitative Methods, Behavioral Aspect – Difference between Quantitative and Qualitative Risk Assessments, Key Ideas for Identifying Schedule Risks and Resource Risks, Trends in Risk Analysis and Assessment
Unit 6	**Risk Handling Strategies-** Concepts of Risk Handling Strategies, Risk Assessment – Assessment Cycle, Quantitative and Qualitative Methods, Details of Risk Acceptance, Risk Mitigation, Risk Transfer, Risk Avoidance, Contingency Reserves, Risk Process Implementation, Risk Documentation.
Unit 7	**Monitoring and Controlling Risk-** Overview of Monitoring and Controlling Risk, Concepts of Monitoring and Controlling Risk, Outputs of Risk Monitoring and Control, Document of Risks, Cost Budgeting, Activity Sequencing, Procurement Planning and Source Selection
Unit 8	**Strategic Risk Response Planning**: Concepts of Strategic Risk Response Planning, Managerial Perspective of Risk, Strategic Risk Response Planning – Project Financial Perspective, Developing a Risk Communication Plan, Balancing Short Term Versus Long Term Plans, Risk Models for Response Planning
Unit 9	**Tools for Managing Risk**: Concepts of Risk Management Tools, Quality Control Tools and Probability Control Tools, Flow Charts and Fishbone Diagram, PERT/CPM for Project Scheduling and Management, Project Insurance
Unit 10	**Organizational Design and Project Risk-** Concepts of Organizational Design and Project Risk, The Purpose of Organizational Design, Management of Needs, Requirements and Planning, Shortcomings and Estimation Errors, Need for Documentation, Trends in Organizational Design and Project Risk
Unit 11	**Risk and Resistance to Change**: Objectives of Change, Details of Risk and Resistance to Change, Imperative – Framework for Change, Reasons for Failure of Change and Resistance to Change, Trends in Handling the Change
Unit 12	**Building a Risk Management Culture**: Risk Management Culture – Organization Culture and Issues, Training and Development in Risk Management Culture, Project Experience and Functional Managers Addressing Quality, Keane's Risk Process, Performance Incentives, Risk Analysis and Mitigation
Unit 13	**Project Risk Audit-** Concept of Project Risk Audit and Interviewing Team Members, Types of Project Risk Audit and Five Components of Audit Risk, Review

	of Lessons Learnt and Design of Critical Forms, Developing a Risk Register and Event Chain Methodology, Advantages and Disadvantages of Project Risk Audit
Unit 14	**Making Risk Policy and Risk Knowledge Transfer**- Concept of Program Management, Concept of Program Management Process, Risk Process, Risk Matrix Terminology and Demystifying Risk – PMBOK, Contract Management and Risk Categorization, Staff Acquisition, Project Reviews and Risk Reassessment, Risk Knowledge Transfer

Reference Books

- Project Management Institute, *PMBOK Guide*
- Chapman, C., & Ward, S., *Project Risk Management*, Wiley
- Smith, N. J., *Managing Risk in Construction Projects*, Blackwell
- Kerzner, H., *Project Management: A Systems Approach*, Wiley

Course Code: DPRM407	**Project Quality Management**

Course Description:

This course provides a detailed understanding of quality management principles in projects, including quality planning, assurance, and control. It covers frameworks such as Six Sigma, Total Quality Management (TQM), ISO standards, and continuous improvement methodologies. The course also emphasizes quality tools, cost of quality, and integration of quality in project performance measurement.

Course Objectives:

On completion of this course, learners will be able to:

- Develop knowledge of quality management principles in projects
- Enable understanding of quality planning and control tools
- Introduce frameworks such as Six Sigma and ISO standards
- Develop skills to integrate quality into project execution and performance measurement.

Course Contents:

Unit No.	Details Syllabus
Unit 1	**Introduction to Project Quality Management**: History of Quality in Project Management, Project Quality Management Concepts, Overview of Project Quality Management, Benefits of Project Quality Management, Industry 4.0 Trends in Project Quality Management
Unit 2	**Capital Budgeting Process**: Concept of Capital Budgeting Process, Managing Project Quality as per PMI, Planning for Quality, Performing Quality Assurance and Quality Control, Quality Control vs. Quality Assurance
Unit 3	**Organizing for Project Management Efficiency:** Concepts of Organizing for Project Management Efficiency, Project Management Approach and Philosophy, Organizational Structures and Project Organizational Structures, Policy Statement, Company-wide Quality

Unit 4	**Project Quality Management in Practice**: History of Project Quality Management in Practice, Definition of Quality in Projects, Cost of Quality, Quality Control Tools and Techniques, Industry 4.0 Trends in Project Quality Management in Practice.
Unit 5	**Quality Framework for Project Management**: Concepts of Quality Framework for Project Management, The Malcolm Baldrige National Quality Awards, The Seven Baldrige Criteria, Business Process Management for Quality, Continuous Process Improvement
Unit 6	**The Process of Organizational Change**- Concepts of the Process of Organizational Change, Steps to Organizational Change, An Organizational Change Model, Organizational Framework for Project Management, Developing a Project Management Culture, The Enterprise Project Management Model.
Unit 7	**Building Organizational Project Management Capability**- Concepts of Building Organizational Project Management Capability, Good Practices in Building Project Management Capability, Model of Project Management Capability, Project Approaches for Capability Development, Industry 4.0 Trends in Building Organizational Project Management Capability
Unit 8	**Communities of Practice in Project Management** Concepts of Communities of Practice in Project Management, Communities of Practice and the Nature of Knowledge, Tangible and Intangible Value, Inside and Across Boundaries, Communities of Practice Structure and Differences
Unit 9	**Project Management Strategies for Six Sigma**: Concepts of Project Management Strategies for Six Sigma Projects, Six Sigma Specialty, DMAIC Process, Six Sigma Cynics' Views, Industry Trends in Project Management Strategies for Six Sigma Projects
Unit 10	**Measuring the Value of Project Management**: Concepts of Measuring the Value of Project Management, Project Management Value Initiative, Developing Measures for Project Management Value, Project Management Value Measurement Process, Industry Trends in Project Management Value Measurement Process
Unit 11	**Qualities and the Bottom-Line in projects**: Concepts of Qualities and the Bottom-Line in Projects, Benefits from Quality Efforts, Value Engineering and Stages of Cost Reduction, Cost Targeting, Quality and Cycle Time and Cycle Time Optimization in Projects
Unit 12	**Critical Success Factors for Quality in Project Management**: Critical Success Factors for Quality in Project Management, Measuring of Success, Areas of Business Excellence, Principles of Success for the Project Manager, Advantages of Critical to Quality and Critical Success Factors
Unit 13	**Supply Chain Management in Quality-** Concepts of Supply Chain Management in Quality, Components of Supply Chain Management, Scope of Activities for Supplier Quality System, Supplier Chain Quality Planning, Control and Improvement, Industry Trends in Supply Chain Management in Quality
Unit 14	**Inspection, Test and Measurement and Quality Standards**- Concepts in Inspection, Test and Measurement, Definition of Inspection, Test and Measurement and Errors of Measurement, Sampling Risks and Types of Sampling Risks, Industry Trends in Inspection, Test and Measurement, History of Quality Standards, Development of Quality Standards, ISO 9000 Quality System Standards, EHS Environment Health Safety and OSHAS, Industry Trends in Quality Standards

Reference Books

- Dale, B. G., *Managing Quality*, Wiley
- Oakland, J. S., *Total Quality Management*, Routledge
- Evans, J. R., & Lindsay, W. M., *Managing for Quality and Performance Excellence*, Cengage
- PMI, *PMBOK Guide*

Course Code: DPRM408	**Contracts Management in Projects**

Course Description:
This course focuses on the principles and practices of contract management in projects, including procurement planning, contract formation, contract types, administration, and closure. It also covers legal aspects of contracts, procurement methods, dispute resolution, and contract performance monitoring. The course emphasizes real-world application in construction, infrastructure, and service-based projects.

Course Objectives:
On completion of this course, learners will be able to:
- To provide an understanding of procurement and contract management processes
- Enable learners to evaluate different types of contracts and procurement methods
- Develop skills in contract administration and negotiation
- Understand legal and regulatory aspects of project contracting.

Course Contents:

Unit No.	Details Syllabus
Unit 1	**Introduction to Contracting**: Definitions of Contract, Evolution of Contracting, Make-or-Buy Decisions, Factors Driving Contracting, Law of Contract, Role of Competition
Unit 2	**Project Procurement Management**: Overview of Procurement Management, Basic Steps in the Procurement Process, Public Procurement in India, E-Procurement
Unit 3	**Overview of Construction Contract:** Project Contracts, Types of Construction Contracts, Standard Conditions in Construction Contracts
Unit 4	**Contract Management**: Definitions of Contract, Evolution of Contracting, Make-or-buy Decisions, Factors Driving Contracting, Law of Contract, Role of Competition.
Unit 5	**Procurement Processes as per PMI**: Plan Procurement Management, Conduct Procurements, Administer Procurements, Close Procurements
Unit 6	**Methods of Procurement for Work and Goods-** Procurement Methods, Bidding, Shopping, Direct Contracting, Force Account.

Unit 7	**Procurement and Supply Cycle for Goods and Services**- Production Process, Production and Development Process, Bill of Materials, Purchase and Buy Decision, Purchase Request, Request for Quotes, Negotiations, Purchase Order and Contracts, Terms Related to Procurement in Contract Management
Unit 8	**Types of Contracts for Work and Goods**: Factors Influencing Types of Contracts, Lumpsum or All Inclusive or Fixed Price Contracts (Works and Goods), Percentage Rate Contracts, Supply and Erect or Install, Commission and Test Contracts (Combination of Supply Goods and Work Contracts), Management Contracts, Public-Private Participation Contracts
Unit 9	**Contract Processed for Works and Goods and Procurement of Consultants for Professional Services**: Process of Contracting, Consultants and Need for Consulting Services, Types of Consulting Services, Steps Involved in the Procurement of Consultants, Prepare the Terms of Reference (TOR), Advertise and Prepare the Shortlist, Consulting Organisations Versus Individual Consultants, Types of Consultancy Contracts, Request for Proposal (RFP), Negotiations and Award of Contract, Contract Performance.
Unit 10	**Contract Management Skills**: Consultants and Need for Consulting Services, Negotiation Skills, Conducting Negotiations, Communication in Negotiation
Unit 11	**Contracts Performance Management**: Control and Flexibility in Contracts, Monitoring and Controlling Technical and Operational Performance of Contracts, Controlling Risks, Incentives and Penalties, Change Order Management, Termination of Contract and Conditions
Unit 12	**Dispute Resolution and Mediation Procedure in Contracts**: Disputes and Claims in Contracts, Dispute Resolution Mechanisms in Contracts, Procedures of the Arbitration Tribunal, International Arbitration Protocols
Unit 13	**Other Issues in Contract Management -** Law of Contracts, Indian Constitution and Government Contracts, Codes, Manuals and Regulations, GFR, Need for Procurement Law, Cost of Contracting, Contracting and Service Economy
Unit 14	**Mergers and Acquisitions** - History of Mergers and Acquisitions, Acquisition Motives, Aligning Mergers and Acquisitions with Corporate Strategy, Constraints to Successful Merger Integration, Acquisition Planning and Strategy, Advantages and Disadvantages

Reference Books

- Kerzner, H., *Project Management: A Systems Approach*, Wiley
- PMI, *PMBOK Guide*
- Smith, N. J., *Engineering Project Management*, Blackwell
- Bower, D., *Contract Administration and Procurement*, Routledge

Supply Chain Management

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COURSE CODE-DSCM405	GLOBAL LOGISTICS AND SUPPLY CHAIN MANAGEMENT

Course Description:
This course on Global Logistics and Supply Chain Management (SCM) provides a comprehensive understanding of the strategies, processes, and technologies that drive global supply chains. Students will explore the complexities of managing logistics across international borders, focusing on key areas such as transportation, inventory management, risk mitigation, and sustainability. The course emphasizes the integration of supply chain components to enhance efficiency, reduce costs, and create competitive advantages. Through case studies and real-world applications, learners will develop the skills to design and manage resilient supply chains in a dynamic global environment.

Course Objectives:

- Understand the fundamental concepts and principles of global logistics and supply chain management.
- Analyse the complexities and challenges of managing supply chains in an international context.
- Evaluate various transportation modes, inventory strategies, and warehousing solutions.
- Apply risk management and sustainability practices in global supply chain operations.
- Develop strategic solutions to optimize supply chain performance and enhance organizational competitiveness.

Course Content:

Unit No.	Detailed Syllabus
Unit 1	Global Trade Environment Structure: International Global Trade Environment, International Contracts and Legal Issues, Global Logistics Operators, Comparison of National and International Logistics, Logistical Packaging
Unit 2	Logistics and Global Supply Chain Management: Managing Logistics in Dynamic World Markets, Market Concentration, Production Dispersion, Product Line Diversity, Strategic Approaches to Global SCM, Coordinating Roles of Global Logistics, Market-Accommodation Flow, Global Supply Chain Collaboration
Unit 3	Logistics in Different Parts of the World: Cultural Differences and their Impact, Logistical Development across Countries, Factors Influencing Logistics, State of Logistics Globally, Trading Blocs
Unit 4	Transportation Infrastructure: Seaports, Airports, Canals, Tunnels, Bridges
Unit 5	Ocean Ships and Shipping: Types of Cargo, Types and Characteristics of Vessels, Shipbuilding
Unit 6	Chartering Bulk Ocean Carriers: Global Bulk Shipping, Supply of Shipping, Charter Agreements, Charter Arrangements

Unit 7	Ocean Liner Contract System Structure: Ocean Liner Conferences, Members, Competition, Associations with Shippers and Governments
Unit 8	International Air Transportation: Aviation Development, Commercial Jet Aircraft, Air Cargo Containers, Rate-Making Factors, Cargo Documentation, Insurance
Unit 9	Surface Transport: Port Movements, Intermodal Transport, Advantages, Containers, Development of Intermodal Traffic, Carriers and Facilities, Air-Ocean Movements, Land Transport in India (Road, Rail, Dry Ports)
Unit 10	Global Logistics Functions and Intermediaries: Outbound and Inbound Logistics Functions, Total Logistics Activities, Logistics Intermediaries
Unit 11	Terms of Sale and Payment: Terms of Sale, Selling Terms, Incoterms, Terms of Payment, Payment Methods (Wire Transfer, Money Order, ACH)
Unit 12	Documentation and Insurance: Documentation, Cargo Insurance, Hull Insurance, Air Shipment Insurance, Land Transport Insurance, Insurance Claims Settlement
Unit 13	Managing Logistics of Export Products: International Transaction Channels, Distribution Channels, Governing Bodies of Trade and Logistics, Hazardous Material Transport, Distribution Channel Risks (Friction/Fraud)
Unit 14	Global Sourcing: Reasons for International Sourcing, Designing Global Sourcing Systems, Procurement Planning, Specification, Evaluation, Relationship Management, Transportation and Inventory Costs, Implementation and Monitoring, Import-Export Issues

Reference Books:

- Gattorna, J. (2023). Dynamic supply chains: Delivering value through people (3rd ed.). FT Publishing
- Unhelkar, B. (2022). Global supply chain management: Leveraging processes, measurements, and tools for strategic corporate advantage. CRC Press
- Christopher, M. (2023). Logistics and supply chain management (6th ed.). Pearson
- Rushton, A., Croucher, P., & Baker, P. (2022). The handbook of logistics and distribution management (7th ed.). Kogan Page
- Emmett, S. (2018). Excellence in warehouse management: How to minimise costs and maximise value (3rd ed.). Wiley

Course Code-DSCM406	**CATEGORY MANAGEMENT IN PURCHASING**

Course Description:

This course “Category Management in Purchasing” provides a comprehensive understanding of category management concepts, strategic sourcing, and procurement practices used for value creation in supply chains. It introduces learners to the foundations, stages, and processes of

category management, including category creation, opportunity analysis, stakeholder management, and sourcing strategy development.
The course emphasizes data-driven decision-making, supplier analysis, market research, innovation, and strategic procurement planning. It also covers practical aspects such as tendering, e-auctions, negotiation, contracting, logistics planning, project implementation, and supplier relationship management. Special attention is given to continuous improvement, governance, performance measurement, sustainability, globalization, and the future role of category management in modern procurement systems. By combining strategic and practical perspectives, the course equips learners with the skills required to manage procurement categories effectively and enhance organizational supply chain performance.

Course Objectives:
After studying this subject, the student should be able to:
- determine the category management process duration
- analyse the supplier's pricing approach
- develop a high-level implementation plan
- create a detailed implementation plan of the sourcing strategy
- explain the importance of supplier relationship management
- establish programme governance structure
- determine the future implications for purchasing

Course Contents:

Unit No.	Detailed Syllabus
Unit 1	Introduction to Category Management: Concept of Category Management, Need for Category Management, Technological Revolution, Consumer Pressure to Reduce Costs, Value Creation through Supply Chain Management, Creating Categories
Unit 2	Fundamentals of Category Management: Three Foundations (Strategic Sourcing, Market Management, Driving Change), Four Pillars (Breakthrough Thinking, Customer Focus, Cross-Functional Teams, Data-Driven Decisions)
Unit 3	Stages of Category Management: Circular Process, Five Stages, Review Process, Full Process, Process Duration
Unit 4	Initiation: Initiating the Process, Initiation Toolkit, Scoping the Category Project, Opportunity Analysis, Securing Project Sponsorship
Unit 5	Forming the Team: Recruiting Team Members, Team Charter, Stakeholder Mapping, Communication Planning, Initial Category Insights, Project Planning
Unit 6	Gaining Insight: Data Gathering Introduction, Insight Toolkit, Supplier Confidence Building, Internal and Supplier Data Collection, Market Research, Supplier Pricing Analysis
Unit 7	Gaining Further Insight: Identifying Value Addition Points, Cost vs. Price Analysis, Technological Change Identification, External Environment Analysis, Market Competitiveness, Leverage Opportunities, Supplier Relationship Analysis, Portfolio Analysis
Unit 8	Driving Innovation: Future Sourcing Strategy, Innovation Steps, Analysis Summary, Strategic Option Generation, Evaluation and Selection

Unit 9	Building Upon Innovation: Developing Selected Strategy, Risk and Contingency Planning, Implementation Planning, Strategic Sourcing Plan, Features and Significance of Source Plan, Plan Approval
Unit 10	Implementing the Sourcing Strategy: Execution of Strategy, Logistics Planning, Detailed Implementation Plan, Project Management, Change Management
Unit 11	Tendering and Contracting: Contract Planning, Tendering Process, E-auctions, Supplier Selection, Negotiation, Legal Finalisation
Unit 12	Bringing Improvement: Continuous Improvement, Lessons Learned, Supplier Relationship Management, Continuous Innovation, Market Analysis, Realignment
Unit 13	Making Category Management Happen: Senior Management Support, Programme Governance, Features of Effective Governance, Programme Planning, Strategy Components, Performance Measurement, Tracking and Reporting, Communication
Unit 14	Future of Category Management: Challenges, Future Implications for Procurement, Corporate Social Responsibility, Globalisation, Evolving Role of Category Management

Reference books:

- NielsenIQ. (2022). Category management: A practitioner's guide to consumer-centric retailing. NielsenIQ
- O'Brien, J. (2023). Category management in purchasing: A strategic approach to maximize business profitability (3rd ed.). Kogan Page
- Monczka, R. M., Handfield, R. B., Giunipero, L. C., & Patterson, J. L. (2020). Purchasing and supply chain management (7th ed.). Cengage Learning
- van Weele, A. J. (2023). Purchasing and supply chain management: Analysis, strategy, planning and practice (8th ed.). Cengage Learning
- Christopher, M. (2023). Logistics and supply chain management (6th ed.). Pearson

COURSE CODE-DSCM407	**PURCHASING AND CONTRACTING FOR PROJECTS**

Course Description:

This course, Purchasing and Contracting provides a comprehensive understanding of procurement, purchasing processes, and contract management practices in organizational and project environments. It introduces learners to procurement systems, purchasing functions, project procurement processes, risk management, and various contracting strategies used in business operations.

The course covers different types of contracts, contract law, tendering procedures, supplier selection, enquiry processes, payment strategies, and tender evaluation methods. It also emphasizes negotiation techniques, incentive mechanisms, ethical and political influences, financial controls, and contract finalization and delivery management. By integrating theoretical concepts with practical procurement and contracting practices, the course equips learners with the skills required for effective purchasing, negotiation, contract administration, and supplier management in modern organizations.

Course Objectives:

On completion of this course, learners will be able to:

- Demonstrate a comprehensive understanding of procurement processes, purchasing strategies, and the roles of buyers in project management contexts.
- Evaluate various contracting strategies, including risk allocation and contract types, to select the most appropriate approach for different project scenarios.
- Interpret key principles of contract law, including formation, performance, and discharge, while addressing ethical considerations such as bribery, facilitation payments, and corruption.
- Apply effective methods for tender selection, evaluation, and payment structuring to ensure transparency, fairness, and compliance in project procurement.
- Develop skills to administer contracts, monitor performance, and manage project completion, including post-project appraisal and lessons learned for future improvements.

Course Contents:

Unit No.	Detailed Syllabus
Unit 1	Introduction to Purchasing and Contracting: Procurement, Purchasing, Buyer
Unit 2	Purchasing and Project Management: Procurement Context, Purchasing Process, User Participation, Organisational Options, Risk, Rules and Relationships
Unit 3	Contracting Strategies: Overview of Contracting Strategies, Influencing Factors, Division of Work, Performance of Work
Unit 4	Contracting I: Contract Categories, Client Risk Contracts, Shared Risk Contracts, Contractor-Managed Risk Contracts
Unit 5	Contracting II: Fixed Price vs Reimbursable Contracts, Other Contract Forms, Alliances and Joint Ventures
Unit 6	Contract Law: Meaning of Terms, Contract Contents, Formation, Terms and Conditions, Issues in Contracting, Discharge and Performance of Contracts
Unit 7	Communicating Requirements: Material Requisition, Scope and Work Definition, Specifications and Standards, Importance of Wording, Queries and Tenderers Conference
Unit 8	Selecting the Tenderers: Tender List Preparation, Selection of Tenderers, Pre-Qualification Process
Unit 9	Enquiry Process: Methods and Documentation, Enquiry Procedures, Open, Selective, Two-Stage, Serial and Negotiated Tendering, Enquiry Documents
Unit 10	Payment Strategies: Terms of Payment, Payment Security, Contract Security
Unit 11	Evaluating the Tenders: Selection and Evaluation Processes, Tender Evaluation, Detailed Appraisal Issues, Decision Making
Unit 12	Incentives: Incentive Mechanisms, Bonus Schemes, Limitations of Cost Incentives, Disincentives
Unit 13	Influences: Political Factors, Facilitation Payments, Bribery and Corruption, Financial Control Mechanisms

Unit 14	Finalising the Deal and Delivering: Negotiation, Finalisation of Contract, Expediting, Inspection, Delivery

Reference books:

- Marsh, P. D. V. (2023). Contracting for engineering and construction projects (6th ed.). Routledge
- Ward, G. (2022). The project manager's guide to purchasing: Procurement, contracts and supply chain management (3rd ed.). Routledge
- O'Brien, J. (2023). Category management in purchasing: A strategic approach to maximize business profitability (3rd ed.). Kogan Page
- Fuller, G. (2018). Purchasing contracts: A practical guide (3rd ed.). Routledge
- Kochanek, S. A. (2007). Business and politics in India. Oxford University Press

COURSE CODE-DSCM408	**SUPPLY CHAIN COST MANAGEMENT**

Course Description:

This course on Supply Chain Cost Management provides a comprehensive understanding of cost structures, analysis, and control mechanisms within supply chain operations. Students will explore key concepts such as cost drivers, total cost of ownership (TCO), activity-based costing (ABC), and cost optimization strategies. The course emphasizes techniques for reducing costs while maintaining service quality, enhancing profitability, and ensuring sustainability. Through case studies and practical exercises, learners will develop the skills to identify cost-saving opportunities, implement efficient cost-control measures, and align supply chain activities with organizational financial goals. This course equips participants with the tools to manage costs effectively in a competitive global environment.

Course Objectives:

After studying this subject, the student should be able to:

- Analyse the challenges in supply chain cost management
- Utilise monitoring and feedback to improve supply transaction performance
- Prepare for cost management strategy-building session
- Describe the process of addressing various types of risks
- Calculate the various types of supply chain costs

Course Contents:

Unit No.	Detailed Syllabus
Unit 1	Introduction to Supply Chain Cost Management: Challenges of Supply Chain Costs, Reducing Cash-to-Cash Cycle Time, Aligning Supply Chains with Customer Value
Unit 2	Structural Cost Management in Supply Chain: Strategic Cost Management Framework and Programme, Enablers, Sourcing Decisions (Make, Buy, Ally), Supplier Selection, Identification, Evaluation, Negotiation, Contracting and

	Monitoring, Buyer–Supplier Relationship Design, Joint Product and Process Design, Inventory Cost Management
Unit 3	Executional Cost Management in Supply Chain: Financial and Non-Financial Performance Measurement, Monitoring and Feedback Systems, Continuous Improvement, Sustainability Assessment
Unit 4	Building Cost Management Models: Supply Contracts and Transactions, Cost Interdependencies, Decision Support Systems, Activity-Based Costing, Facility Location and Capacity Allocation Models
Unit 5	AIM & DRIVE Process: Cost Analysis Foundations, Volume Leveraging, Price and Cost Analysis, Overview of AIM & DRIVE Eight-Step Process, Organising Cost Management Exercises
Unit 6	Agreeing on Cost Management Needs: Supply Chain Leadership, Cost Management Strategies, Strategy Development Sessions, Team Goal Setting
Unit 7	Identifying Critical Costs: Process Mapping, Identification of Critical Costs, Selection of Costs for Management
Unit 8	Measuring Secondary and Tertiary Costs: Cost Measurement Methods, Allocation-Based and Management-Based Systems, Cost Drivers in Formula-Based Costing, Writing Cost Formulas
Unit 9	Defining Key Cost Drivers and Strategic Options: Reviewing Cost Drivers, Identification Techniques, Weighted Analysis, Improvement Potential, Developing Strategic Options
Unit 10	Reducing and Managing Cost Escalation: Risk-Return Model, Constraint Identification, Strategy Development, Risk-Benefit Evaluation, Strategy Prioritisation
Unit 11	Implementing Action Plans: Detailed Planning, Risk Assessment, Feasibility Checks, Responsibility Allocation, Timeline Setting, Contingency Planning, Stakeholder Engagement
Unit 12	Verifying Plans with Cost Monitors: Monitoring Guidelines, Coordinator Roles, Performance Tracking, Documentation, Goal Review, Action Plan Modification, Team Evaluation
Unit 13	Continuous Improvement and Leveraging: Strategy Expansion, Idea Sharing, Use of Databases and Web Technologies, Critical Success Factors, Top Management Support, Supplier Commitment, Performance Measurement and Rewards
Unit 14	Cost Reduction in Healthcare Supply Chain: Streamlining Healthcare Supply Chains, Key Success Factors, Cost Transparency, Regulatory Challenges, Future Opportunities in Healthcare Logistics

Reference books:

- Bender, E. A. (2020). An introduction to mathematical modeling (2nd ed.). Dover Publications
- Denison, E., & Cawthray, R. (2022). Packaging prototypes 3: Design fundamentals for successful packaging. Rotovision
- Kusiak, A. (2023). Smart manufacturing: Fundamentals and applications. Springer
- Anklesaria, J. (2022). Supply chain cost management: The aim & drive process for achieving extraordinary results (updated ed.).

- Lynch, S. G. (2020). Supply chain risk: A handbook of assessment, management, and performance. Kogan Page

BFSI

- performance. Kogan Page

COURSE CODE-DBFI405	ALM AND TREASURY MANAGEMENT

Course Description:
This course on Asset-Liability Management (ALM) and Treasury Management provides an in-depth understanding of managing financial assets and liabilities to optimize an organization's profitability and liquidity. Students will explore key concepts such as interest rate risk, liquidity risk, capital management, and cash flow forecasting. The course covers essential treasury functions, including investment management, fund mobilization, and regulatory compliance. Through case studies and practical exercises, learners will gain the skills to develop effective ALM strategies and manage treasury operations, ensuring financial stability and alignment with organizational goals in dynamic market conditions.

Course Objectives:
On completion of this course, learners will be able to:

- To analyse the significance and techniques of ALM.
- To analyse the Structure, scope, role and significance of treasury management.
- To be able to describe the best and latest treasury management products and practices.
- To be able to implement the hedging techniques for various types of risk.

Course Content:

Unit No:	Detailed Syllabus
Unit 1	ALM: An Overview, Functions, Advantages, Strategic ALM.
Unit 2	Treasury Management: An Overview, Organisation, Importance, Functions. ALM & Treasury management.
Unit 3	Banking Business: Introduction, Nature & Scope, Operations and special transactions
Unit 4	Regulatory Aspects of Banking: Regulatory aspects, Capital Adequacy, Ratios, Asset Classifications.
Unit 5	Financial Statements of Banking Companies: Bank Financial Statements, Financial Ratios.
Unit 6	ALM tools and techniques: Basic Concepts, Risks: Liquidity, Interest Rates, Currency, Portfolio & Securitization. Developments in ALM.
Unit 7	Managing Treasury Function: The treasury function, decentralisation of treasury function, performance management, internal control.
Unit 8	Financial Markets & Interest Rates: Capital Markets, Money Market, Instruments, Options, Futures, Swaps, Interest Rates, Yield Curve.
Unit 9	Financing: Debt Management, Equity Management, Investment Management

Unit 10	Strategic Treasury Management: Overview, Role, Treasury management Practices.
Unit 11	Risk Management I: Foreign Exchange Risk Management
Unit 12	Risk Management II: Interest rate risk Management.
Unit 13	Managing Treasury Function: Decentralisation, Performance management, Internal Control
Unit 14	Treasury Systems: Overview, Clearing & Settlements, Technology and Treasury Systems, Outsourcing, Taxation & Accounting.

Reference Books:

- Chaudhary, Moorad "An introduction to Banking: Liquidity Risk and Asset- Liability Management", Wiley, 2011.
- Cooper, Robert, "Corporate Treasury and Cash Management", Palgrave Macmillan, 2004.
- Bragg, Steven M, "Treasury Management: The Practitioner's Guide", Wiley, 2010.
- RBI relevant notifications and circulars.
- SEBI relevant notifications and circulars.

COURSE CODE-DBFI406	**BANKING REGULATIONS AND RISK MANAGEMENT IN BANKING**

Course Description:
This course on Banking Regulations and Risk Management in Banking provides a comprehensive understanding of international regulatory frameworks and their role in maintaining financial stability. Students will explore the Basel Accords (Basel I, II, III) and their impact on capital adequacy, risk-weighted assets, and banking supervision. The course covers key risk management practices, including credit, market, operational, and liquidity risk. Through case studies and practical applications, learners will develop the skills to assess and implement risk management strategies, ensuring compliance with global standards and enhancing the resilience of banking institutions in an evolving regulatory landscape.

Course Objectives:
On completion of this course, learners will be able to:

- Understand and analyse various types of risks associated with banking and the relationship between risk and capital.
- Understand role of Basel in Bank Risk Management & ongoing enhancements brought about in Basel III.
- Understand and learn regulations and other tools to manage these risks.

Course Contents:

Unit No:	Detailed Syllabus
Unit 1	Risk and Risk Management: Risk definition, Types of Risks-Credit risk, operational risk and market risk
Unit 2	Asset-Liability Management (ALM): Concept, Organisation and, Techniques

Unit 3	Credit Risk Management: Introduction, Capital adequacy norms under Basel I & II, RBI guidelines on Risk Management-Standardized and Advanced approaches for Credit Risk; Internal Capital Adequacy Assessment process.
Unit 4	Credit rating/credit scoring and rating system: Introduction, Design, Credit Bureaus, Stress test and sensitivity analysis
Unit 5	Operational Risk: Introduction, Likely forms of operational risk, Causes for significant increase in operational risk, Basel Norms, RBI guidelines.
Unit 6	Sound Principles of Operational Risk Management (SPOR): POR identification, SPOR measurement.
Unit 7	Control of Operational Risk: Capital allocation for operational risk, Methodology, qualifying criteria for banks for the adoption of the methods.
Unit 8	Market risk: Introduction, Types of Market risks, Liquidity risk, Interest rate risk, foreign exchange risk, Price risk, Commodity risk, Prescriptions and treatment of market risk under Basel norms.
Unit 9	Risk measurement: Calculation of risk, Risk exposure analysis.
Unit 10	Risk Management: Capital adequacy norms, prudential norms, exposure norms, regulatory prescriptions of risk management.
Unit 11	Securitisation: Concept, Need of Securitization, Features, Securitization process, Limitations.
Unit 12	Basel I
Unit 13	Basel II
Unit 14	Basel III

Reference Books:

- Agarwal OP, Banking and Insurance, Himalaya Publishing House, Mumbai, 2021.
- Indian Institute of Banking and Finance, Risk Management, Mumbai, 2026.
- Vijayaragavan Iyengar, Introduction to Banking, Excel Books, New Delhi, 2009.
- The Indian Institute of Bankers, Modern Banking, Mumbai, 2022.
- Uppal RK, Rimpi Kaur, Banking Sector Reforms in India, New Century Publications, New Delhi, 2006.

COURSE CODE-DBFI407	**INSURANCE MANAGEMENT**

Course Description:

This course on Insurance Management provides an in-depth exploration of the principles, products, and operational practices in the life insurance industry. Students will learn about key concepts such as risk assessment, underwriting, policy design, pricing, and claims management. The course also covers regulatory frameworks, ethical considerations, and the role of life insurance in financial planning. Through case studies and practical applications, learners will gain insights into managing life insurance portfolios, ensuring customer satisfaction, and aligning organizational strategies with market demands. This course equips participants with the knowledge and skills to navigate the complexities of life insurance management effectively.

Course Objectives:

On completion of this course, learners will be able to:

- Understand the insurance mechanism and identify the relationship between insurers and their customers.
- Compare and contrast the types of life insurance available in the market.
- Explain the legalities and administrative issues of life policies.
- Interpret the regulatory framework governing life insurance.

Course Contents:

Unit No.	Detailed Syllabus
Unit 1	The Conceptual Framework of Insurance: What Is Insurance? Brief History of Insurance, Perils and Risks, Classification of Risks- Hazards, How Insurance Works – Classes of Insurance – Assumptions – Importance of Insurance Industry
Unit 2	Life Insurance Concept: Types of Insurance, Variations of Whole Life Insurance, Other types of Life Insurance.
Unit 3	Life insurance Contractual Provisions: Dividend Options, Non - Forfeiture Options, Settlement Options, Additional Life Insurance Benefits.
Unit 4	PRINCIPLES OF LIFE ASSURANCE: Life Insurance contract., Principle of utmost good faith, Insurable Interest, Principle of Indemnity, Needs and Insurance.
Unit 5	PREMIMUM AND BONUSES: Concept of Premium, Premium calculation, Actuarial valuation, Bonus.
Unit 6	Life Insurance Product: Traditional / Unit Linked Policies, Individual and Group Policies, With Profit and Without Profit, Interest sensitive product, Term Assurance, Annuities, Endowment Assurance etc., Insurance Products for Female and Children etc.
Unit 7	Underwriting: Introduction, Classification of Risks, Financial Underwriting, Non-medical underwriting, Underwriting by Agents, Recent Trends.
Unit 8	Policy Conditions: Age, Days of Grace, Lapse and Non-forfeiture, Paid up value, Revival, Assignment, Nomination, Surrenders and Loan, Indisputability of the Policy, Married Women's Property Act Policy.
Unit 9	CLAIMS: Intimation Procedure, Claims Documents- Forms, Settlement Procedure, Accident and Disability Benefits.
Unit 10	Group Insurance: Special, Legal / other features of Group Insurance; Superannuation Schemes, Group Insurance Scheme EDLI and Non-EDLI, Group Gratuity Scheme, Group Leave Encashment Schemes, Retirement Schemes.
Unit 11	Re-insurance: Reasons for Reinsurance, Types of Reinsurance – Alternatives to Traditional Reinsurance, Functions of Reinsurance, Advantages and Disadvantages of Reinsurance.
Unit 12	Life Insurance Risk Factors governing sum assured: Types of risks – Methods of calculating economic risk in life insurance proposal, Measurement of risk and morality tables, Calculation of premium, Treatment of sub-standard risks, Life insurance fund, Valuation and investment surplus, Payment of bonus.
Unit 13	Legal Framework: Insurance Act, 1938, L.I.C. Act, 1956, IRDA Act, 1999, Consumer Protection Act, 1986 (COPA), Ombudsman, Other Acts, (Income Tax Act, MWP Acts.)

Unit 14	Life Insurance Marketing: Marketing concept, Distribution Channel, The Customer, Strengthening Relationship, Function of an Agent, Advertisement, Customer Satisfaction

Reference Books:

- Principles and Practice of Insurance, M. N. Mishra & S. B. Mishra, S. Chand Publishing, 2023.
- Reinsurance Principles and Practices, K. C. Mishra, Cengage India, 2020.
- Insurance Law and Practice, P. Periasamy, Himalaya Publishing House, 2022.
- Marketing of Insurance Services, S. Balachandran, Insurance Institute of India, 2021.

COURSE CODE: DBFI408	**INVESTMENT BANKING AND WEALTH MANAGEMENT**

Course Description:
This course delves into the fundamentals and advanced concepts of investment banking and wealth management, offering insights into capital markets, mergers and acquisitions, portfolio management, and client-focused wealth strategies. It emphasizes the analytical tools, regulatory frameworks, and ethical considerations essential for success in these fields, preparing students for dynamic roles in the financial sector.

Course Objectives:
On completion of this course, the student will learn to:

- Explain the roles and functions of investment banking and wealth management in financial markets.
- Analyse financial instruments and strategies for portfolio diversification and risk management.
- Apply valuation techniques in mergers, acquisitions, and corporate restructuring.
- Develop client-specific financial plans, integrating ethical and regulatory considerations.
- Assess the impact of emerging trends like FinTech on financial services.

Course Contents:

Unit No.	Detailed Syllabus
Unit 1	Introduction to Investment Banking: Overview of Investment Banking, History and Evolution of Investment Banking, Role of Investment Banks in Financial Markets, Key Functions: Advisory, Underwriting, and Market Making.
Unit 2	Financial Instruments in Investment Banking: Equity Securities, Debt Securities and Bonds, Derivatives (Forwards, Options, Futures, Swaps), Structured Financial Products.
Unit 3	Capital markets: Primary vs. Secondary Markets, Initial Public Offerings (IPOs), Private Placements, Role of Investment Banks in Capital Raising.

Unit 4	Mergers and Acquisitions: M&A Processes and Strategies, Synergies and Valuation Techniques, Role of Investment Banks in M&A Deals, Legal and Regulatory Aspects of M&A.
Unit 5	Investment Risk and Planning: Types of Investment Risk, Investment Planning Process, Investment Alternatives, Strategies for Managing Investment Risks
Unit 6	Principles of Portfolio Management: Overview of Portfolio Management and Diversification, Modern Portfolio Theory (MPT) and Efficient Frontier, Active vs. Passive Portfolio Management.
Unit 7	Corporate Finance and Investment Banking: Role of Investment Banks in Corporate Financing, Working Capital Management in Corporates, Impact of Corporate Governance on Investment Banking.
Unit 8	Global Financial Markets and Institutions: Structure and Functioning of Global Financial Markets, Role of International Financial Institutions (IMF, World Bank), Challenges of Cross-Border Transactions in Investment Banking.
Unit 9	Introduction to Wealth Management: Fundamentals of Wealth Management, Client Profiling and Segmentation, Wealth Management Lifecycle, Goals-Based Financial Planning
Unit 10	Wealth Management in Banking: Introduction to Wealth Management in Banking, Wealth Management Services Offered by Banks, Client Relationship Management in Wealth Management, Revenue Generation through Wealth Management.
Unit 11	Financial Planning and Advisory: Financial Plan Components: Goals, Budget, and Investments, Tax Planning Strategies, Retirement Planning, Estate Planning Essentials.
Unit 12	Regulatory and Ethical Aspects: Overview of Regulatory Bodies (SEBI, SEC, etc.), Key Financial Market Regulations, Ethics in Investment Banking and Wealth Management, Compliance Requirements.
Unit 13	Taxation in Wealth Management: Tax-Efficient Investment Strategies, Tax Implications of Financial Instruments, International Tax Considerations, Tax Compliance and Reporting
Unit 14	Technology in Financial Services: FinTech and Its Applications, Robo-Advisors in Wealth Management, Blockchain and Smart Contracts, AI and Predictive Analytics in Investment Banking.

Reference Books:

- Bradstreet, d. (2009). Wealth management.
- Castillo, J. J., & Mcaniff, P. J. (2007). The practitioner’s guide to investment banking, mergers & acquisitions, corporate finance. Circinus Business Press.
- Evensky, H., Horan, S. M., & Robinson, T. R. (2021). *The new wealth management: the financial advisor's guide to managing and investing client assets* (Vol. 28). John Wiley & Sons.
- M.Y.Khan (2019): Financial Services, Tata McGraw –Hill.

Digital Marketing

Course Code: DDIM401	DIGITAL BRANDING AND REPUTATION MANAGEMENT

Course Description

This course on Digital Branding and Reputation Management focuses on building and maintaining a strong brand presence in the digital world. It covers strategies to create brand identity, engage consumers, and manage online reputation effectively. The course also explores handling challenges like negative feedback, crises, and ethical issues. Learners gain insights into branding across digital platforms and ORM techniques. It combines theory with practical applications to prepare learners for dynamic and competitive markets.

Course Objectives

- Learners will develop the ability to build effective digital branding strategies for creating a strong brand identity.
- Learners will learn to monitor and analyze online reputation using relevant tools and techniques.
- Learners will evaluate the effectiveness of branding and ORM strategies to improve performance.
- Learners will apply ethical practices in managing online reputation and handling digital challenges.
- Learners will adapt to emerging trends and technologies in digital branding and reputation management.

Course Contents:

Units No.	Details
Unit 1	Introduction to Digital Branding: The evolution of branding in the digital era, Digital touchpoints and their role in brand-building, Differences between personal and corporate branding
Unit 2	Foundations of Online Reputation Management (ORM) : ORM and its importance, Key components of ORM, The reputation risk landscape
Unit 3	Brand Identity and Digital Presence: Elements of a consistent brand identity, Developing a brand's digital footprint, The role of visual branding in digital environments
Unit 4	Consumer Perception and Sentiment Analysis: Understanding consumer behaviour through sentiment analysis, Tools for analyzing sentiment on social media and review platforms, Applications of sentiment analysis in managing reputation
Unit 5	Monitoring Online Reputation: Tools for monitoring brand mentions (Google Alerts, Hootsuite, etc.), Metrics for reputation management, Building dashboards for ORM monitoring
Unit 6	Addressing Negative Feedback and Crises : Types of negative feedback (constructive criticism vs. trolling), Best practices for responding to reviews and social media comments, Tools for automating and personalizing feedback responses
Unit 7	The Role of Reviews in Online Reputation: Importance of reviews for businesses (Google, Yelp, Trustpilot), Encouraging positive reviews, Handling fraudulent and unfair reviews

Unit 8	Proactive ORM Strategies : Building trust through transparency, Encouraging user-generated content (UGC), and Collaboration with brand ambassadors for positive reinforcement
Unit 9	ORM in Social Media and E-commerce Platforms: Managing ORM on platforms like Facebook, Instagram, LinkedIn, and Twitter, Dealing with feedback on e-commerce platforms (Amazon, Flipkart), Case studies on ORM in social commerce
Unit 10	Crisis Management in ORM: Steps for crisis preparedness, Communication strategies during a brand crisis, Post-crisis reputation recovery strategies
Unit 11	Legal and Ethical Considerations in ORM: Understanding defamation and libel in the digital context, Privacy concerns in monitoring and managing online reputation, Ethical challenges in ORM (e.g., fake reviews, astroturfing, black-hat ORM tactics), Industry standards and compliance regulations
Unit 12	Advanced ORM Techniques: Leveraging AI and machine learning for sentiment analysis and ORM, Predictive ORM: Anticipating and mitigating risks before they escalate, Managing global and cross-platform reputation
Unit 13	Analytics and Reporting for ORM: ORM reporting structures and frequency, Integrating ORM metrics with business KPIs, Visualization techniques for presenting ORM data
Unit 14	Future of Digital Branding and ORM: Trends shaping the future of ORM (blockchain, decentralised reviews), The role of sustainability in reputation management, Innovations in brand engagement and protection

References:

- *Digital Branding: A Complete Step-by-Step Guide to Strategy, Tactics, Tools and Measurement*, Daniel Rowles, (4e), Kogan Page, 2025.
- *Digital Transformation and Corporate Branding: Opportunities and Pitfalls for Identity and Reputation Management*, Maria Teresa Cuomo and Pantea Foroudi, Routledge, 2024.
- *Business Digitalization: Corporate Identity and Reputation*, Pantea Foroudi and Maria Teresa Cuomo, Routledge, 2024.
- *B2B Brand Management: Incorporating Performance Branding, Transformative Marketing and Artificial Intelligence*, Philip Kotler and Waldemar Pfoertsch, (2e), Springer, 2025.
- *Building Strong Brands*, David A. Aaker, Free Press, 2023.
- *Strategic Brand Management: Building, Measuring, and Managing Brand Equity*, Kevin Lane Keller and Vanitha Swaminathan, (5e), Pearson Education, 2024.

Course Code: DDIM402	**DIGITAL ENTREPRENEURSHIP**

Course Description

This course on Digital Entrepreneurship focuses on building and scaling digital businesses in a rapidly evolving environment. It equips learners with skills in creativity, business models, digital marketing, e-commerce, and product development. The course also covers legal, financial, and ethical aspects of running digital ventures. It explores emerging trends such as artificial intelligence, blockchain, and digital transformation. Through case studies and practical applications, learners gain hands-on experience in managing successful digital businesses.

Course Objectives

- Understand the Fundamentals of Digital Entrepreneurship
- Develop and Validate Digital Business Ideas
- Design Effective Digital Business Models
- Implement Digital Marketing Strategies
- Analyze Financial and Legal Aspects of Digital Ventures
- Prepare for the Future of Digital Entrepreneurship

Units No.	Details
Unit 1	Introduction to Digital Entrepreneurship: Definition and scope of digital entrepreneurship, Evolution of digital businesses, Key differences between traditional and digital entrepreneurship, The role of technology in entrepreneurship
Unit 2	Digital Business Models: Overview of digital business models (e.g., subscription, freemium, marketplace), Revenue generation and monetization strategies, Case studies of successful digital business models
Unit 3	Ideation and Opportunity Recognition in the Digital Space: Identifying digital entrepreneurship opportunities, Methods for generating and validating ideas, Disruptive innovation and its role in digital ventures
Unit 4	Digital Market Research and Customer Insights: Tools and techniques for online market research, Customer journey mapping and persona development, Analyzing customer behaviour and preferences
Unit 5	Building a Digital Product: Steps in developing a minimum viable product (MVP), Lean startup methodology, Tools and platforms for product development (e.g., web/mobile apps)
Unit 6	E-Commerce and Online Business Operations: Setting up an online store or digital business, Managing logistics, payments, and customer service, E-commerce platforms (e.g., Shopify, WooCommerce, Magento)
Unit 7	Digital Marketing for Entrepreneurs: Overview of digital marketing channels, Developing a digital marketing strategy for startups, Performance tracking and analytics
Unit 8	Social Media and Brand Building: Leveraging social media for brand awareness and engagement, Influencer marketing and collaborations, Case studies of successful digital brand-building
Unit 9	Digital Transformation and Innovation: How traditional businesses embrace digital transformation, The impact of emerging technologies (AI, blockchain, IoT) on entrepreneurship, Innovating with digital tools and platforms
Unit 10	Financial Management in Digital Ventures: Key financial metrics for digital entrepreneurs, Funding sources for digital startups (venture capital, crowdfunding, bootstrapping), Financial planning and budgeting for digital businesses

Unit 11	Legal and Ethical Issues in Digital Entrepreneurship: Intellectual property in the digital age (copyright, patents, trademarks), Data privacy, cybersecurity, and compliance, Ethical considerations in digital entrepreneurship
Unit 12	Scaling Digital Ventures: Strategies for scaling a digital business, Operational and organizational challenges at scale, Global expansion and market entry strategies
Unit 13	Entrepreneurial Leadership in the Digital Era: Leadership styles and decision-making in digital businesses, Building and managing remote teams, Cultivating a culture of innovation in digital ventures
Unit 14	Digital Tools for Entrepreneurs: Overview of productivity tools (project management, CRM, communication), Cloud computing, SaaS, and digital ecosystems, Analytics and data visualization tools for decision-making

References:

- Digital Entrepreneurship, Tobias Kollmann, (Latest ed.), Springer, 2022.
- Digital Entrepreneurship: Exploring Alertness, Orientation, and Innovation in the Digital Economy, Nezameddin Faghih (Ed.), (Latest ed.), Springer, 2024.
- Digital Entrepreneurship: Impact on Business and Society, Mariusz Soltanifar, Mathew Hughes & Lutz Göcke, (Latest ed.), Springer, 2021.
- Digital Entrepreneurship, Jonathan Allen, (1e), Taylor & Francis, 2019.
- Digital Entrepreneurship: Disruption and New Venture Creation, Futonge Nzembayie & Anthony Buckley, (1e), Edward Elgar Publishing, 2022.
- Digital Entrepreneurship, Suvarna S., Suresh Chalavadi & Lavanya N. Gowda, (Latest ed.), Click Publishing, 2025.

Course Code- DDIM403	**E - MARKETING**

Course Description

This course on E-Marketing focuses on using digital technologies and online platforms to promote products and services effectively. It covers key areas such as search engine marketing, social media marketing, email marketing, and online consumer behaviour. The course emphasizes creating data-driven marketing strategies to enhance customer engagement and brand visibility. Learners will also explore analytics tools to measure and optimize campaign performance. Through practical applications and case studies, the course prepares learners to succeed in the digital marketing landscape.

Course Objectives:

- Explain the importance of e-marketing and illustrate the use of search engine marketing, online advertising and online marketing strategies.
- Formulate an integrated and comprehensive e-marketing plan.
- Review and prioritize the strategic options for boosting customer acquisition, conversion, and retention using digital marketing.

Units No.	Details

Unit 1	E-Marketing: An Overview: Introduction, Objectives, Definition, History and Features of E-Marketing, Scope, Benefits and Problems of E-Marketing, E-marketing Techniques, Internet Marketing, Digital Marketing and E-marketing
Unit 2	Components of E-Marketing: Introduction, Objectives, Customers (Buyers): Impulsive, Patient and Analytical Sellers and Products, Infrastructure: Building a Product System, Intermediaries, Other Business Partners, Support Services, Digital Products
Unit 3	E-Customers: Introduction, Objectives, Definition of E-Customers, Dealing with Customers' Motivations and Expectations, Fears and Phobias of Online Customers, Online Buying Process
Unit 4	Types of E-Market: Introduction, Objectives, Definition of E-market, E-Malls, E-Storefront, E-Marketplace
Unit 5	E-Marketing Tools: Introduction, Objectives, E-Mail Marketing, Creating a Website, Social Media Marketing, Pay-Per-Click Advertising, Search Engine Optimization or Paid Search Engine Listing, Search Engine Marketing, Blogging and Classified Advertising
Unit 6	E-Marketing Plan: Introduction, Objectives, Definition of E-Marketing Plan, Situational Analysis, Setting Objectives, Marketing Mix Decision, Budget Allocation, Action Plan, Measuring Success
Unit 7	E-Marketing Mix Strategy: Introduction, Objectives, the 4Ps in E-Marketing, Additional 3Ps in E-Marketing of Services, the 2P+2C+3S Formula in E-Marketing
Unit 8	Applications of E-Marketing: Introduction, Objectives, Online Advertising, Direct Response Medium, Role of Distribution in E-Marketing, Lead Generation Platform, Customer Service Mechanism, Relationship Building Medium
Unit 9	Strategic Advantages of E-Marketing: Introduction, Objectives, Creating New Sources of Competitive Advantage, Direct Distribution Model, Re-engineering the Supply Chain, Targeting Underserved Segments, Lower Price Barrier, Delivery Systems for Digital Products
Unit 10	Methods and Techniques of E-Marketing I: Introduction, Objectives, Advertising Techniques, Selling Methods, Sales Promotion, Public Relations
Unit 11	Methods and Techniques of E-Marketing II: Introduction, Objectives, Sponsorship Techniques, Direct Marketing Techniques, Merchandising Techniques, Online Seminar Techniques, Word-of-Mouth Marketing Techniques
Unit 12	E-Metrics: Introduction, Objectives, E-Metrics: An Overview, Monitoring E-Marketing Activities, User Surveys and Usability Testing, Tracking and Site Analysis Tools
Unit 13	E-Customer Relationship Management: Introduction, Objectives, Concept of E-CRM, Prerequisites for the Implementation of E-CRM, Transition from

	CRM to E-CRM, E-CRM and Community Building, E-CRM and Customer Lifecycle, E-CRM versus E-Loyalty, Conversion Optimization
Unit 14	Legal and Ethical Issues in E-Marketing: Introduction, Objectives, Need for E-Business Legal Protection, Legal and Ethical Issues in E-Marketing, Privacy, Digital Property, Online Expression, Emerging Issues

Reference Book:

- Digital Marketing: Strategy, Planning and Disruption, Annmarie Hanlon, (3e), SAGE Publications, 2025.
- Digital Marketing: Strategy, Implementation and Practice, Dave Chaffey & Fiona Ellis-Chadwick, (8e), Pearson, 2022.
- Digital Marketing Strategy: An Integrated Approach to Online Marketing, Simon Kingsnorth, (3e), Kogan Page, 2022.
- Concept Building Approach to Digital Marketing, Neeru Kapoor, (2e), Cengage Learning, 2022.
- Marketing 5.0: Technology for Humanity, Philip Kotler, Hermawan Kartajaya & Iwan Setiawan, (Latest ed.), Wiley, 2021.
- E-Marketing: Planning, Tools and Practice, Grzegorz Mazurek, (Latest ed.), Routledge, 2020.

Course Code: DDIM404	**ADVERTISING AND BRAND MANAGEMENT**

Course Description: This course on Advertising and Brand Management focuses on the strategic and creative aspects of promoting products and building strong brand identities. It covers advertising principles, campaign planning, media selection, and consumer behaviour along with digital marketing trends. The course emphasizes brand positioning, brand equity, and integrated marketing communications (IMC). Learners develop skills to create compelling brand narratives and use analytics for effective marketing strategies. Through case studies and practical insights, learners learn to design impactful campaigns and build long-term brand loyalty.

Learning Objectives

On completion of this course, learners will be able to:

- To understand the importance of the advertising process as a key decision area for effective management decisions.
- To increase students' understanding of important issues in planning and executing advertising campaigns.
- To introduce the basic advertising/marketing communications elements that support brand development.
- To strategically apply advertising and communication strategies to brand needs.
- To enable students to understand how brand equity contributes to corporate value, and the various methods used to evaluate brand equity.

Course Contents:

Units No.	Details
Unit 1	Overview of Advertising Management: Introduction, Meaning and Framework of Advertising, Defining Advertising, Advertising to Persuade the Buyer, Importance of Advertising in Marketing, Role of Advertising in Marketing Mix and Positioning, The exciting world of Indian Advertising, Theories of Advertising
Unit 2	Structure of an Advertising Agency: Introduction, Overview of an Advertising Agency, Departments of an Advertising Agency, Creative department, Media department, Client servicing department, Marketing research department, Ancillary Services, Interfacing with Client's Organisation, Integration of Services
Unit 3	Setting Advertising objectives: Introduction, Marketing Objectives, Advertising Objectives, Sales-oriented/ Behavioural objectives, Communication-oriented objectives, The DAGMAR Approach to Setting Objectives and Measuring, Advertising Effectiveness, Kinds of Advertising Objectives, The Advertising Communication System, The communication process, The advertising exposure model, The need for clear understanding of objectives
Unit 4	Advertising Copy and Design strategy: Introduction, Advertising Copy, Types of advertising copy, Creativity in Advertising, Copy Testing Methods, Visual Strategies, Art department specialists, Developing a layout, Power of synergy
Unit 5	Media Planning: Introduction, Media Objectives, Media Options, Measuring Media Audiences, Determining Media Weight, Media Schedule Decisions, Space and Time Buying, Cost Considerations, The Role of a Media Planner and a Media Buyer, Media Trends
Unit 6	Advertising Budgets: Introduction, Factors Influencing Budget Setting, Typical Spending Patterns, Common Budgeting Approaches, Budgeting Methods, Decision Support System (DSS), Structure of DSS, Allocating the Marketing Communication Budget
Unit 7	Ethics in Advertising: Introduction, Perceived Role of Advertising, The Advertising Standards Council of India (ASCI), Forms of Ethical Violations, Misleading Advertising, Advertising to Children, Product endorsements, Stereotyping, Cultural, religious and racial sensitivity in Advertising, Obscenity in advertising
Unit 8	Advertising and Integrated Marketing Communications – Elements of Integrated Marketing Communication – Direct Marketing – Sales Promotion – Public Relations – Publicity – Personal Selling
Unit 9	Management of sales promotion: Importance & need for sales promotion; planning for consumer schemes & contests; different types of consumer schemes.
Unit 10	Brand Management: Concept of a brand; Brand evolution; Branding challenges and opportunities; Brand elements; Brand resonance pyramid;
Unit 11	Strategic Brand Management process, Brand Architecture-Module Overview, Product vs. Brand, Strategic Brand Management, Brand Architecture, Designing Brand Architecture
Unit 12	Brand Identity, Brand Personality-Module Overview, Brand Identity, Who Defines the Brand Identity, Brand Personality, David Aaker's Model, Kapferer's Model
Unit 13	Brand Positioning and Re-positioning- Module Overview, Brand Positioning, Brand Positioning Basics, Brand Positioning Statement- Guidelines, Brand Re-positioning, Brand Positioning vs. Product Positioning
Unit 14	Brand Communication, Brand Knowledge: Awareness & Image, The Importance of Communication, Brand Awareness, Brand Image

References:

- *Advertising and Brand Management*, Dr. Alvirakumari A. Rajwadi, Dr. Dilip R. Vahoniya & Dr. Prakashkumar H. Patel, (1e), Himalaya Publishing House, 2025.
- *Advertising Media Planning: A Brand Management Approach*, Larry D. Kelley, Kim Bartel Sheehan, Lisa Dobias, David E. Koranda & Donald W. Jugenheimer, (5e), Routledge, 2023.
- *Advertising Brand Management*, Rohit Manglik, (Latest ed.), EduGorilla Publications, 2023.
- *Brand Management*, Vibha Mathur & Saloni Arora, (Latest ed.), PHI Learning, 2022.
- *Advertising and Brand Management*, Amita Charan & Rekha Dahiya, (1e), Pearson/Academic Publisher, 2018.
- *Advertising Management: Concepts and Cases*, Manendra Mohan, (Latest ed.), McGraw Hill Education, 2020.

Course Code: DDIM401	**DIGITAL BRANDING AND REPUTATION MANAGEMENT**

Course Description

This course on Digital Branding and Reputation Management focuses on building and maintaining a strong brand presence in the digital world. It covers strategies to create brand identity, engage consumers, and manage online reputation effectively. The course also explores handling challenges like negative feedback, crises, and ethical issues. Learners gain insights into branding across digital platforms and ORM techniques. It combines theory with practical applications to prepare learners for dynamic and competitive markets.

Course Objectives

- Learners will develop the ability to build effective digital branding strategies for creating a strong brand identity.
- Learners will learn to monitor and analyze online reputation using relevant tools and techniques.
- Learners will evaluate the effectiveness of branding and ORM strategies to improve performance.
- Learners will apply ethical practices in managing online reputation and handling digital challenges.
- Learners will adapt to emerging trends and technologies in digital branding and reputation management.

Course Contents:

Units No.	**Details**
Unit 1	Introduction to Digital Branding: The evolution of branding in the digital era, Digital touchpoints and their role in brand-building, Differences between personal and corporate branding

Unit 2	Foundations of Online Reputation Management (ORM) : ORM and its importance, Key components of ORM, The reputation risk landscape
Unit 3	Brand Identity and Digital Presence: Elements of a consistent brand identity, Developing a brand's digital footprint, The role of visual branding in digital environments
Unit 4	Consumer Perception and Sentiment Analysis: Understanding consumer behaviour through sentiment analysis, Tools for analyzing sentiment on social media and review platforms, Applications of sentiment analysis in managing reputation
Unit 5	Monitoring Online Reputation: Tools for monitoring brand mentions (Google Alerts, Hootsuite, etc.), Metrics for reputation management, Building dashboards for ORM monitoring
Unit 6	Addressing Negative Feedback and Crises : Types of negative feedback (constructive criticism vs. trolling), Best practices for responding to reviews and social media comments, Tools for automating and personalizing feedback responses
Unit 7	The Role of Reviews in Online Reputation: Importance of reviews for businesses (Google, Yelp, Trustpilot), Encouraging positive reviews, Handling fraudulent and unfair reviews
Unit 8	Proactive ORM Strategies : Building trust through transparency, Encouraging user-generated content (UGC), and Collaboration with brand ambassadors for positive reinforcement
Unit 9	ORM in Social Media and E-commerce Platforms: Managing ORM on platforms like Facebook, Instagram, LinkedIn, and Twitter, Dealing with feedback on e-commerce platforms (Amazon, Flipkart), Case studies on ORM in social commerce
Unit 10	Crisis Management in ORM: Steps for crisis preparedness, Communication strategies during a brand crisis, Post-crisis reputation recovery strategies
Unit 11	Legal and Ethical Considerations in ORM: Understanding defamation and libel in the digital context, Privacy concerns in monitoring and managing online reputation, Ethical challenges in ORM (e.g., fake reviews, astroturfing, black-hat ORM tactics), Industry standards and compliance regulations
Unit 12	Advanced ORM Techniques: Leveraging AI and machine learning for sentiment analysis and ORM, Predictive ORM: Anticipating and mitigating risks before they escalate, Managing global and cross-platform reputation
Unit 13	Analytics and Reporting for ORM: ORM reporting structures and frequency, Integrating ORM metrics with business KPIs, Visualization techniques for presenting ORM data
Unit 14	Future of Digital Branding and ORM: Trends shaping the future of ORM (blockchain, decentralised reviews), The role of sustainability in reputation management, Innovations in brand engagement and protection

References:

- *Digital Branding: A Complete Step-by-Step Guide to Strategy, Tactics, Tools and Measurement*, Daniel Rowles, (4e), Kogan Page, 2025.
- *Digital Transformation and Corporate Branding: Opportunities and Pitfalls for Identity and Reputation Management*, Maria Teresa Cuomo and Pantea Foroudi, Routledge, 2024.
- *Business Digitalization: Corporate Identity and Reputation*, Pantea Foroudi and Maria Teresa Cuomo, Routledge, 2024.

- *B2B Brand Management: Incorporating Performance Branding, Transformative Marketing and Artificial Intelligence*, Philip Kotler and Waldemar Pfoertsch, (2e), Springer, 2025.
- *Building Strong Brands*, David A. Aaker, Free Press, 2023.
- *Strategic Brand Management: Building, Measuring, and Managing Brand Equity*, Kevin Lane Keller and Vanitha Swaminathan, (5e), Pearson Education, 2024.

Course Code: DDIM402	**DIGITAL ENTREPRENEURSHIP**

Course Description
This course on Digital Entrepreneurship focuses on building and scaling digital businesses in a rapidly evolving environment. It equips learners with skills in creativity, business models, digital marketing, e-commerce, and product development. The course also covers legal, financial, and ethical aspects of running digital ventures. It explores emerging trends such as artificial intelligence, blockchain, and digital transformation. Through case studies and practical applications, learners gain hands-on experience in managing successful digital businesses.

Course Objectives
- Understand the Fundamentals of Digital Entrepreneurship
- Develop and Validate Digital Business Ideas
- Design Effective Digital Business Models
- Implement Digital Marketing Strategies
- Analyze Financial and Legal Aspects of Digital Ventures
- Prepare for the Future of Digital Entrepreneurship

Units No.	**Details**
Unit 1	Introduction to Digital Entrepreneurship: Definition and scope of digital entrepreneurship, Evolution of digital businesses, Key differences between traditional and digital entrepreneurship, The role of technology in entrepreneurship
Unit 2	Digital Business Models: Overview of digital business models (e.g., subscription, freemium, marketplace), Revenue generation and monetization strategies, Case studies of successful digital business models
Unit 3	Ideation and Opportunity Recognition in the Digital Space: Identifying digital entrepreneurship opportunities, Methods for generating and validating ideas, Disruptive innovation and its role in digital ventures
Unit 4	Digital Market Research and Customer Insights: Tools and techniques for online market research, Customer journey mapping and persona development, Analyzing customer behaviour and preferences
Unit 5	Building a Digital Product: Steps in developing a minimum viable product (MVP), Lean startup methodology, Tools and platforms for product development (e.g., web/mobile apps)

Unit 6	E-Commerce and Online Business Operations: Setting up an online store or digital business, Managing logistics, payments, and customer service, E-commerce platforms (e.g., Shopify, WooCommerce, Magento)
Unit 7	Digital Marketing for Entrepreneurs: Overview of digital marketing channels, Developing a digital marketing strategy for startups, Performance tracking and analytics
Unit 8	Social Media and Brand Building: Leveraging social media for brand awareness and engagement, Influencer marketing and collaborations, Case studies of successful digital brand-building
Unit 9	Digital Transformation and Innovation: How traditional businesses embrace digital transformation, The impact of emerging technologies (AI, blockchain, IoT) on entrepreneurship, Innovating with digital tools and platforms
Unit 10	Financial Management in Digital Ventures: Key financial metrics for digital entrepreneurs, Funding sources for digital startups (venture capital, crowdfunding, bootstrapping), Financial planning and budgeting for digital businesses
Unit 11	Legal and Ethical Issues in Digital Entrepreneurship: Intellectual property in the digital age (copyright, patents, trademarks), Data privacy, cybersecurity, and compliance, Ethical considerations in digital entrepreneurship
Unit 12	Scaling Digital Ventures: Strategies for scaling a digital business, Operational and organizational challenges at scale, Global expansion and market entry strategies
Unit 13	Entrepreneurial Leadership in the Digital Era: Leadership styles and decision-making in digital businesses, Building and managing remote teams, Cultivating a culture of innovation in digital ventures
Unit 14	Digital Tools for Entrepreneurs: Overview of productivity tools (project management, CRM, communication), Cloud computing, SaaS, and digital ecosystems, Analytics and data visualization tools for decision-making

References:

- Digital Entrepreneurship, Tobias Kollmann, (Latest ed.), Springer, 2022.
- Digital Entrepreneurship: Exploring Alertness, Orientation, and Innovation in the Digital Economy, Nezameddin Faghih (Ed.), (Latest ed.), Springer, 2024.
- Digital Entrepreneurship: Impact on Business and Society, Mariusz Soltanifar, Mathew Hughes & Lutz Göcke, (Latest ed.), Springer, 2021.
- Digital Entrepreneurship, Jonathan Allen, (1e), Taylor & Francis, 2019.
- Digital Entrepreneurship: Disruption and New Venture Creation, Futonge Nzembayie & Anthony Buckley, (1e), Edward Elgar Publishing, 2022.
- Digital Entrepreneurship, Suvarna S., Suresh Chalavadi & Lavanya N. Gowda, (Latest ed.), Click Publishing, 2025.

Course Code- DDIM403	**E - MARKETING**

Course Description

This course on E-Marketing focuses on using digital technologies and online platforms to promote products and services effectively. It covers key areas such as search engine marketing, social media marketing, email marketing, and online consumer behaviour. The course emphasizes creating data-driven marketing strategies to enhance customer engagement and brand visibility. Learners will also explore analytics tools to measure and optimize campaign performance. Through practical applications and case studies, the course prepares learners to succeed in the digital marketing landscape.

Course Objectives:

- Explain the importance of e-marketing and illustrate the use of search engine marketing, online advertising and online marketing strategies.
- Formulate an integrated and comprehensive e-marketing plan.
- Review and prioritize the strategic options for boosting customer acquisition, conversion, and retention using digital marketing.

Units No.	Details
Unit 1	E-Marketing: An Overview: Introduction, Objectives, Definition, History and Features of E-Marketing, Scope, Benefits and Problems of E-Marketing, E-marketing Techniques, Internet Marketing, Digital Marketing and E-marketing
Unit 2	Components of E-Marketing: Introduction, Objectives, Customers (Buyers): Impulsive, Patient and Analytical Sellers and Products, Infrastructure: Building a Product System, Intermediaries, Other Business Partners, Support Services, Digital Products
Unit 3	E-Customers: Introduction, Objectives, Definition of E-Customers, Dealing with Customers' Motivations and Expectations, Fears and Phobias of Online Customers, Online Buying Process
Unit 4	Types of E-Market: Introduction, Objectives, Definition of E-market, E-Malls, E-Storefront, E-Marketplace
Unit 5	E-Marketing Tools: Introduction, Objectives, E-Mail Marketing, Creating a Website, Social Media Marketing, Pay-Per-Click Advertising, Search Engine Optimization or Paid Search Engine Listing, Search Engine Marketing, Blogging and Classified Advertising
Unit 6	E-Marketing Plan: Introduction, Objectives, Definition of E-Marketing Plan, Situational Analysis, Setting Objectives, Marketing Mix Decision, Budget Allocation, Action Plan, Measuring Success
Unit 7	E-Marketing Mix Strategy: Introduction, Objectives, the 4Ps in E-Marketing, Additional 3Ps in E-Marketing of Services, the 2P+2C+3S Formula in E-Marketing
Unit 8	Applications of E-Marketing: Introduction, Objectives, Online Advertising, Direct Response Medium, Role of Distribution in E-Marketing, Lead Generation Platform, Customer Service Mechanism, Relationship Building Medium
Unit 9	Strategic Advantages of E-Marketing: Introduction, Objectives, Creating New Sources of Competitive Advantage, Direct Distribution Model, Re-engineering the Supply Chain, Targeting Underserved Segments, Lower Price Barrier, Delivery Systems for Digital Products

Unit 10	Methods and Techniques of E-Marketing I: Introduction, Objectives, Advertising Techniques, Selling Methods, Sales Promotion, Public Relations
Unit 11	Methods and Techniques of E-Marketing II: Introduction, Objectives, Sponsorship Techniques, Direct Marketing Techniques, Merchandising Techniques, Online Seminar Techniques, Word-of-Mouth Marketing Techniques
Unit 12	E-Metrics: Introduction, Objectives, E-Metrics: An Overview, Monitoring E-Marketing Activities, User Surveys and Usability Testing, Tracking and Site Analysis Tools
Unit 13	E-Customer Relationship Management: Introduction, Objectives, Concept of E-CRM, Prerequisites for the Implementation of E-CRM, Transition from CRM to E-CRM, E-CRM and Community Building, E-CRM and Customer Lifecycle, E-CRM versus E-Loyalty, Conversion Optimization
Unit 14	Legal and Ethical Issues in E-Marketing: Introduction, Objectives, Need for E-Business Legal Protection, Legal and Ethical Issues in E-Marketing, Privacy, Digital Property, Online Expression, Emerging Issues

Reference Book:

- Digital Marketing: Strategy, Planning and Disruption, Annmarie Hanlon, (3e), SAGE Publications, 2025.
- Digital Marketing: Strategy, Implementation and Practice, Dave Chaffey & Fiona Ellis-Chadwick, (8e), Pearson, 2022.
- Digital Marketing Strategy: An Integrated Approach to Online Marketing, Simon Kingsnorth, (3e), Kogan Page, 2022.
- Concept Building Approach to Digital Marketing, Neeru Kapoor, (2e), Cengage Learning, 2022.
- Marketing 5.0: Technology for Humanity, Philip Kotler, Hermawan Kartajaya & Iwan Setiawan, (Latest ed.), Wiley, 2021.
- E-Marketing: Planning, Tools and Practice, Grzegorz Mazurek, (Latest ed.), Routledge, 2020.

Course Code: DDIM404	**ADVERTISING AND BRAND MANAGEMENT**

Course Description: This course on Advertising and Brand Management focuses on the strategic and creative aspects of promoting products and building strong brand identities. It covers advertising principles, campaign planning, media selection, and consumer behaviour along with digital marketing trends. The course emphasizes brand positioning, brand equity, and integrated marketing communications (IMC). Learners develop skills to create compelling brand narratives and use analytics for effective marketing strategies. Through case studies and practical insights, learners learn to design impactful campaigns and build long-term brand loyalty.

Learning Objectives

On completion of this course, learners will be able to:

- To understand the importance of the advertising process as a key decision area for effective management decisions.
- To increase students' understanding of important issues in planning and executing advertising campaigns.
- To introduce the basic advertising/marketing communications elements that support brand development.
- To strategically apply advertising and communication strategies to brand needs.
- To enable students to understand how brand equity contributes to corporate value, and the various methods used to evaluate brand equity.

Course Contents:

Units No.	Details
Unit 1	Overview of Advertising Management: Introduction, Meaning and Framework of Advertising, Defining Advertising, Advertising to Persuade the Buyer, Importance of Advertising in Marketing, Role of Advertising in Marketing Mix and Positioning, The exciting world of Indian Advertising, Theories of Advertising
Unit 2	Structure of an Advertising Agency: Introduction, Overview of an Advertising Agency, Departments of an Advertising Agency, Creative department, Media department, Client servicing department, Marketing research department, Ancillary Services, Interfacing with Client’s Organisation, Integration of Services
Unit 3	Setting Advertising objectives: Introduction, Marketing Objectives, Advertising Objectives, Sales-oriented/ Behavioural objectives, Communication-oriented objectives, The DAGMAR Approach to Setting Objectives and Measuring, Advertising Effectiveness, Kinds of Advertising Objectives, The Advertising Communication System, The communication process, The advertising exposure model, The need for clear understanding of objectives
Unit 4	Advertising Copy and Design strategy: Introduction, Advertising Copy, Types of advertising copy, Creativity in Advertising, Copy Testing Methods, Visual Strategies, Art department specialists, Developing a layout, Power of synergy
Unit 5	Media Planning: Introduction, Media Objectives, Media Options, Measuring Media Audiences, Determining Media Weight, Media Schedule Decisions, Space and Time Buying, Cost Considerations, The Role of a Media Planner and a Media Buyer, Media Trends
Unit 6	Advertising Budgets: Introduction, Factors Influencing Budget Setting, Typical Spending Patterns, Common Budgeting Approaches, Budgeting Methods, Decision Support System (DSS), Structure of DSS, Allocating the Marketing Communication Budget
Unit 7	Ethics in Advertising: Introduction, Perceived Role of Advertising, The Advertising Standards Council of India (ASCI), Forms of Ethical Violations, Misleading Advertising, Advertising to Children, Product endorsements, Stereotyping, Cultural, religious and racial sensitivity in Advertising, Obscenity in advertising
Unit 8	Advertising and Integrated Marketing Communications – Elements of Integrated Marketing Communication – Direct Marketing – Sales Promotion – Public Relations – Publicity – Personal Selling
Unit 9	Management of sales promotion: Importance & need for sales promotion; planning for consumer schemes & contests; different types of consumer schemes.

Unit 10	Brand Management: Concept of a brand; Brand evolution; Branding challenges and opportunities; Brand elements; Brand resonance pyramid;
Unit 11	Strategic Brand Management process, Brand Architecture-Module Overview, Product vs. Brand, Strategic Brand Management, Brand Architecture, Designing Brand Architecture
Unit 12	Brand Identity, Brand Personality-Module Overview, Brand Identity, Who Defines the Brand Identity, Brand Personality, David Aaker's Model, Kapferer's Model
Unit 13	Brand Positioning and Re-positioning- Module Overview, Brand Positioning, Brand Positioning Basics, Brand Positioning Statement- Guidelines, Brand Re-positioning, Brand Positioning vs. Product Positioning
Unit 14	Brand Communication, Brand Knowledge: Awareness & Image, The Importance of Communication, Brand Awareness, Brand Image

References:

- *Advertising and Brand Management*, Dr. Alvirakumari A. Rajwadi, Dr. Dilip R. Vahoniya & Dr. Prakashkumar H. Patel, (1e), Himalaya Publishing House, 2025.
- *Advertising Media Planning: A Brand Management Approach*, Larry D. Kelley, Kim Bartel Sheehan, Lisa Dobias, David E. Koranda & Donald W. Jugenheimer, (5e), Routledge, 2023.
- *Advertising Brand Management*, Rohit Manglik, (Latest ed.), EduGorilla Publications, 2023.
- *Brand Management*, Vibha Mathur & Saloni Arora, (Latest ed.), PHI Learning, 2022.
- *Advertising and Brand Management*, Amita Charan & Rekha Dahiya, (1e), Pearson/Academic Publisher, 2018.
- *Advertising Management: Concepts and Cases*, Manendra Mohan, (Latest ed.), McGraw Hill Education, 2020.

Retail Management

Course Code- DRMM405	**International Retailing**

Course Introduction: The course on International Retailing introduces students to the concepts and practices of retail business in the global marketplace. It covers international market entry strategies, global supply chain management, cultural influences on consumer behavior, and retail formats across different countries. The course also highlights challenges such as localization, regulations, and digital transformation in international retail operations. Through case studies and practical examples, students will learn to develop effective retail strategies for global competitiveness and success.

Course Objectives:

- Explain the concepts in international retail business with respect to foreign trade/international business

- Apply the current business phenomenon and to evaluate the global business environment in terms of retail practices
- Analyse the principle of international business and strategies adopted by firms to expand globally
- Integrate concept in international business concepts with functioning of global trade

Course Contents:

Unit No.	Details Syllabus
Unit 1	**New Ventures in Retail:** Basic concept of retailing – retail development – types of retailers – multi channel retailing – organized retailing in India – services retailing.
Unit 2	**The Evolution of Retail Formats:** Theories of retail development-Environmental, Cyclical and Conflict Theory; The Concept of life cycle in Retail- Phases of growth in retail markets; Business models in retail-Classification based on ownership /Merchandise offered/Franchising /Non Store Retailing/Non-Store Retailing / Other Formats.
Unit 3	**Sales Management & B2B Marketing:** International Mktg - Scope, Concepts and Environment- International Trade – Barriers and Facilitators; Regional Integration and Cultural Influence, Segmentation, Positioning- The Marketing Plan and Entry Mode Selection- Products, Branding and Distribution.
Unit 4	**International Retailing:** International Retailing- Alternative conceptions of international retailing, definitions, interpretations and classification- Trends in the internationalization of retailing and evolution of international retailing - Motives for international retailing.
Unit 5	**International Retailing Strategy:** Changing Boundaries in International Retailing, Reasons for Retailers' International Expansion, assessing the potential of retail markets - Methods of international retailing, accessing retail markets, the form of entry, joint ventures, franchising, acquisition etc. Marketing planning for differing international and regional requirements.
Unit 6	**Retailing Practices:** Case studies (USA): Type of Retailer. Multi-Channel Retailing, Global Customer Buying Behavior 1.Wal-Mart 2. Kroger 3. Albertsons 4. JC Penny.
Unit 7	**Retailing Practices:** Case Studies(EU): 1. J. Sainsbury (UK) 2. Carrefour (France) 3. Metro (Germany) 4. Ahold (Netherlands).
Unit 8	**Retailing Practices:** Case Studies (Asia): 1. Ito - Yokada (Japan) 2. Lianhua (China) 3. Big Bazar (India) 4. Reliance (India)4. Big Bazaar.
Unit 9	**Multibrand Retailing:** Concept and Definition of Multi Brand Retail –History of FDI in Single Brand retail in India-History of FDI in Multi Brand Retail in India-The pros and cons of allowing FDI in Single Brand retail in India-The pros and cons of allowing FDI in Multi Brand Retail in India-Government of India Policy on FDI in Single Brand Retail and FDI in Multiband retail.
Unit 10	**Customer Relationship Management (CRM):** Creating and implementing Relationship Marketing Strategies- Introduction- People-Processes Proactive/ Personalized Service- What sort of Relationship for what sort of Customers Relationship Marketing Plan- Relationship Management Chain- Value Proportions- Identifying appropriate customer value segments-Designing value delivery systems- Managing and Maintaining delivered satisfaction.

Unit 11	**Consumer Behaviour in Services:** Distinctive characteristics service operations-Service Bench Marking-Service strategy - Designing the service enterprise – Service Quality-Service facility location-Managing service operations-Service-Supply relationships vehicle routing.
Unit 12	**Services Product Management: Services** Management Understanding Customer Service, Service Triangle, Benefits of Exceptional Customer Service, Customer Delight, First Impressions, and Perception vs. Reality
Unit 13	**Customer Engagement Management:** Customer Relationship Management. Retail Selling Skills: Pre-Check, Opening the Sale, Probing, Demonstration, Trial, Close Handling Objections, Closing, Confirmations & Invitations. Retail Management Information Systems, Legal and Ethical Issues in Retailing
Unit 14	**Experiential Retailing:** Competing in Foreign Markets- Why Companies Expand into Foreign Markets- Cross- Country Differences in Cultural, Demographic and Market Conditions- Concept of Multi country Competition and Global Competition- Strategy Options for Entering and Competing in Foreign Markets- Profit Sanctuaries, Cross market Subsidization and Global; Strategic Alliances and Joint Ventures with F Foreign partners.-Competing in Emerging Foreign Markets-Cross Border Strategic Alliances

Reference Book :

1. *International Retailing*, Nicholas Alexander and Anne Marie Doherty, Oxford University Press, 2020.
2. *Global Retailing*, John Dawson and Roy Larke, Routledge, 2021.
3. *Strategic Issues in International Retailing*, John Dawson, Roy Larke and Masao Mukoyama, Routledge, 2022.
4. *Retail Marketing Management*, David Gilbert, Pearson Education, 2021.
5. *Retail Management: A Strategic Approach*, Barry Berman and Joel R. Evans, Pearson, 2023.
6. *Global Marketing: Contemporary Theory, Practice and Cases*, Ilan Alon, Eugene Jaffe and Christiane Prange, Routledge, 2022.

Course Code- DRMM406	**Entrepreneurship in Retail Business**

Course Introduction: Entrepreneurship in Retail Business focuses on the fundamentals of starting and managing a successful retail venture. The course covers retail opportunity identification, business planning, store location selection, retail operations, and customer-focused strategies. Students learn about financial planning, inventory management, marketing techniques, and the role of technology in modern retailing. Through practical projects and case studies, the course develops entrepreneurial skills and prepares learners to build and sustain competitive retail businesses.

Course Objectives:

- Understand the implementation issues including financial, legal, operational and administrative procedures involved in starting new business ventures
- Analyze the feasibility of a new venture business concept
- Examine and analyze issues related to legal aspects of retail business

- Apply the entrepreneurial process in real market setting
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Course Contents:

Unit No.	Details Syllabus
Unit 1	**Basics of Entrepreneurship:** Entrepreneurship: Importance, Characteristics and Qualities of Entrepreneurship; Entrepreneurial; Role of Entrepreneurship, Ethics and Social Responsibilities.
Unit 2	**Role of Government:** Role of Government; Role of IDBI, NIESBUD, SISI, DIC Financial Institutions Commercial Banks, Entrepreneurial Development Institutes, Universities and other Educational Institutions Offering Entrepreneurial Development Programme
Unit 3	**Training: Human Resources:** Retail organization- Laws involved in HR.- Motivation-Customer Psychology-Training needs for employee-Top Grading- Obstacles to Top grading- Astronomical Costs of Mis- Hires- Company killers and Company Derailers- recruitment Best Practices- How to Avoid Mis Hires- CIDS (Chronological In-Depth Structure) based Model – Coaching to fix weakness-Interview's guide- Avoiding Legal Problems: Bulletproof Approach
Unit 4	**Women Entrepreneurship:** Role & Importance, Profile Women Entrepreneur, Problems of Women Entrepreneurs, Women Entrepreneurship Development in India.
Unit 5	**Creativity and Entrepreneurship Management:** Creativity and Entrepreneurship Sources and Methods of Ideas Planning and Development of Programmes E-Business Ventures; New Venture Management.
Unit 6	**Legal Aspects of Retail Business:** Legal Issues and Best Practice-Data Protection and Privacy, electronic communications and the Indian Directive, self-regulation and codes of practice- pitfalls and opportunities of international direct and interactive marketing- consumer and technological landscape of the future- Emerging Trends in Network Marketing- B2B, C2C, Planning, scheduling, negotiating and buying media on and offline- Core marketing technology components; data warehousing
Unit 7	**Developing Business Idea:** business intelligence appliances, campaign management applications, sales force automation, customer interaction and contact centre applications, Data fusion- Network Marketing
Unit 8	**Critical Aspects in Retail Entrepreneurship:** Success Stories India, MLM
Unit 9	**Project Management:** Corporate sector in agri-business: Reasons for increased interest of corporate sector in agribusiness, opportunities, in the agri-business, benefits of corporate driven agri-business system involvement of corporate sector in agri-business: select case studies. Digitalizing the Indian rural markets- e-rural marketing: select live case studies-ITC e-choupal, TARA haat, EID Parry's India agriline, Kandhamal Apex Spices Association for Marketing (KASAM)
Unit 10	**Rural Retailing & Social Marketing:** Rural Marketing of FMCG's: Indian FMCG industry, characteristics of Indian FMCG sector, Challenges in the FMCG industry, Rural Marketing of FMCG's: Select case studies Rural Marketing of Consumer durables: Issues related to consumer durables in the rural market, Rural Marketing of Consumer durables

Unit 11	**Changing Nature of Retail:** Marketing strategy, Logistic and customer service – Allocation models – forecasting methods – depot location and distribution – network design – framework for inventory and transportation cost – transport mode choice – routing decisions – order processing – inventory and ware housing decisions – inventory models – lean logistic. - Managing variety and mass customization – Reverse supply chain – forward supply chain – source management in supply chain.
Unit 12	**Retail Marketing Environment:** Components of modern marketing information system, analysing the retail marketing environment- Micro and Macro, Demand forecasting –need and techniques
Unit 13	**Agriprneurship and Social Entrepreneurship:** Meaning of Agripreneurship, Social entrepreneurship: Meaning and Cases
Unit 14	**Emerging Issues in Retail:** Promotion Impact- On the Marketing Mix-On the Customer-Promotions and Integrated Marketing- Creating a Customer Relations- Characteristics of an Integrated Programme Strategic Considerations-Promotion's role- Overcoming barriers in Integrated Market

Reference Book :

1. *Navigating the New Retail Landscape: A Guide for Business Leaders*, Alan Treadgold and Jonathan Reynolds, Oxford University Press, 2025.
2. *Retailing: Principles, Practices and Case Studies*, Trilok Kumar Jain, Amazon Digital Services LLC, 2025.
3. *The Science of Shopping: How Psychology and Innovation Create a Winning Retail Strategy*, Kate Hardcastle, Kogan Page Publishers, 2025.
4. *Retail Innovations in Business Models*, Sneha Rajput, Firdous Ahmad Malik, Samriti Mahajan and Amna Javed, IGI Global, 2025.
5. *Fashion Entrepreneurship: Retail Business Planning*, Michele M. Granger, Tina M. Sterling and Ann Cantrell, Fairchild Books, 3rd Edition.

COURSE CODE: DRMM407	**RETAIL BUYING AND MERCHANDISING**

Course Description

Retail Branding and Merchandising focus on the strategies used to enhance retail performance through effective buying, product planning, and visual presentation. The course helps students understand retail buying processes, merchandise management, store layout, and visual merchandising techniques. It emphasizes selecting the right products, pricing strategies, inventory management, and creating attractive store displays to influence customer buying behaviour. Students also learn how branding and merchandising contribute to customer satisfaction, sales growth, and competitive advantage in the retail industry.

Course Objectives

On completion of this course, learners will be able to:

- To be equipped with the knowledge and skills required in retail buying.

- To state the key process involved in retail buying process.
- To explain the tactics of smart merchandising management as per various store layouts.
- To gain knowledge about store image and security issues.
- To analyze the future of visual merchandising and role of non-store retailing.

Course Contents:

Unit No.	Details Syllabus
Unit 1	**Buying Function in Retail** : Introduction on Buying Function, Buying Environment characteristics, Method of evaluating the performance of a buyer, buying functions in both centralized and decentralized organizational structures, Concept of consignment buying.
Unit 2	**Selection of Vendors Developing Relationships in Domestic Markets:** Concept of vendors and their role in retailing, Types of vendors, how to contact potential vendors and the criteria for selecting vendor.
Unit 3	**Developing Relationships in Domestic Markets:** Importance of maintaining a strong relationship between a buyer and a vendor, Developing Relationships and Objectives of Relationship, Commitment and Trust in Developing Relationships, Domestic Markets and Components of Domestic Market.
Unit 4	**Locating Sources in Foreign Markets:** Different aspects considered while analyzing foreign market for procuring products from different countries, Issues to note while buying from various foreign sources, Concept of Foreign Markets, Steps conducted in analysing foreign markets.
Unit 5	**Buying From Foreign Sources:** Process for buying from foreign sources as well as the drawbacks in this, Process of locating foreign sources, Strategies to Find Buyers for New Products
Unit 6	**Market Visits:** Types of markets for retail buying, Purpose and frequency of market visits, how to plan market visit, Retailers and Retails Buying.
Unit 7	**Negotiating with Vendors:** How to prepare for negotiations and the different stages of a negotiation, how to develop an effective negotiation strategy, Negotiating and Negotiators Making the Purchase Terms used when negotiating the terms of sale, Special buying conditions, how retail buyers make purchases under these conditions, how retail buyers place purchase orders and follow-up these orders.
Unit 8	**The Merchandise Mix:** Concept of Merchandise Mix: Merchandise line, The Assortment of Products: Assortment strategy, Merchandise Mix of Show Off Role of a merchandiser Other Atmospherics in Merchandising: Color scheme and Lighting.
Unit 9	**Store Management in Merchandising:** Planning a Store Layout, Various Types of Store Layouts: Grid layout, Forced-path layout, Free-form layout, Boutique layout, Combined layout, Store Space Allocation: Heads of space allocation in a store, Managing Customer Navigation in a Store, General Rules of Customer Traffic in a Store, The Loop for Guiding the Shoppers through a Store.
Unit 10	**Store Design and Display:** Concept of Store Design and Display: Objectives of store design, Purpose and importance of display and Rules of display planning,

	Display Settings, Store Design: Exterior of a store, Interior of a store and Window displays.
Unit 11	**Merchandise Presentation Strategies:** Color blocking, other techniques of merchandise placement, Physical materials used to support the display and Components of display, Some Useful Display Fixtures: Shelves, Gondolas, Round racks, Four ways, Saccades and fixation, Replenishes and Planogramming.
Unit 12	**Store Image and Security:** Introduction-Objectives, Concept of Image Mix, Elements of Image Mix: Merchandise, Fixtures, Sound/Music, Odor, Visuals and Employees, Elements that Levy Negative Impact on Shoppers, Change of Image and Security Issues.
Unit 13	**Managing Communication for a Retail Store Offerings:** Introduction, Objectives, Marketing Communication, Thematic Communication, Methods of Communication: Graphics and Signage.
Unit 14	**The Future of Visual Merchandising:** Prospects of Visual Merchandising, Non-Store Retailing - Space Management and Visual Merchandising Techniques- Direct Selling- Catalogue Selling – e-tailing, Tele-marketing.

Reference Book:

- *Retail Product Management: Buying and Merchandising, Rosemary Varley, (3e), Routledge, 2024.*
- *Merchandise Buying and Management, John Donnellan, (4e), Fairchild Books, 2024.*
- *Retailing Management, Swapna Pradhan, (7e), McGraw Hill, 2024.*
- *Retail Management, Suja R. Nair, (2e), Himalaya Publishing House, 2025.*
- *Omnichannel Retailing for the Fashion Business, Tunmin Catherine Jai and Jihyun Vick, Fairchild Books, 2025.*
- *The Future of Retail and Service Design: Sustainable, Phygital, and Community, Bethan Alexander, Katelijn Quartier, Mia Münster, Zakkiya Khan and Francesca Murialdo, Routledge, 2025.*

Course Code: DRMM408	**Advertising and Brand Management**

Course Description: Advertising and Brand Management focuses on the strategies and creative techniques used to promote products and build strong brands. The course covers advertising principles, consumer behaviour, branding, media planning, and digital marketing trends. Students learn how to create effective advertising campaigns, develop brand positioning, and manage brand equity through integrated marketing communication (IMC). It also combines theoretical concepts with practical case studies and industry-oriented learning to prepare students for competitive marketing environments.

Course Objectives

On completion of this course, learners will be able to:

- To understand the importance of the advertising process as a key decision area for effective management decisions.
- To increase students' understanding of important issues in planning and executing advertising campaigns.
- To introduce the basic advertising/marketing communications elements that support brand development.
- To strategically apply advertising and communication strategies to brand needs.
- To enable students to understand how brand equity contributes to corporate value, and the various methods used to evaluate brand equity.

Course Contents:

Unit No.	Details Syllabus
Unit 1	**Overview of Advertising Management:** Introduction, Meaning and Framework of Advertising, Defining Advertising, Advertising to Persuade the Buyer, Importance of Advertising in Marketing, Role of Advertising in Marketing Mix and Positioning, The exciting world of Indian Advertising, Theories of Advertising
Unit 2	**Structure of an Advertising Agency:** Introduction, Overview of an Advertising Agency, Departments of an Advertising Agency, Creative department, Media department, Client servicing department, Marketing research department, Ancillary Services, Interfacing with Client's Organisation, Integration of Services
Unit 3	**Setting Advertising objectives:** Introduction, Marketing Objectives, Advertising Objectives, Sales-oriented/ Behavioural objectives, Communication-oriented objectives, The DAGMAR Approach to Setting Objectives and Measuring, Advertising Effectiveness, Kinds of Advertising Objectives, The Advertising Communication System, The communication process, The advertising exposure model, The need for clear understanding of objectives
Unit 4	**Advertising Copy and Design strategy**: Introduction, Advertising Copy, Types of advertising copy, Creativity in Advertising, Copy Testing Methods, Visual Strategies, Art department specialists, Developing a layout, Power of synergy
Unit 5	**Media Planning:** Introduction, Media Objectives, Media Options, Measuring Media Audiences, Determining Media Weight, Media Schedule Decisions, Space and Time Buying, Cost Considerations, The Role of a Media Planner and a Media Buyer, Media Trends
Unit 6	**Advertising Budgets:** Introduction, Factors Influencing Budget Setting, Typical Spending Patterns, Common Budgeting Approaches, Budgeting Methods, Decision Support System (DSS), Structure of DSS, Allocating the Marketing Communication Budget
Unit 7	**Ethics in Advertising:** Introduction, Perceived Role of Advertising, The Advertising Standards Council of India (ASCI), Forms of Ethical Violations, Misleading Advertising, Advertising to Children, Product endorsements, Stereotyping, Cultural, religious and racial sensitivity in Advertising, Obscenity in advertising
Unit 8	**Advertising and Integrated Marketing Communications –** Elements of Integrated Marketing Communication – Direct Marketing – Sales Promotion – Public Relations – publicity – Personal Selling

Unit 9	**Management of sales promotion:** Importance & need for sales promotion; planning for consumer schemes & contests; different types of consumer schemes.
Unit 10	**Brand Management:** Concept of a brand; Brand evolution; Branding challenges and opportunities; Brand elements; Brand resonance pyramid.
Unit 11	**Strategic Brand Management process, Brand Architecture-**Module Overview, Product vs. Brand, Strategic Brand Management, Brand Architecture, Designing Brand Architecture.
Unit 12	**Brand Identity, Brand Personality-**Module Overview, Brand Identity, Who Defines the Brand Identity, Brand Personality, David Aaker's Model, Kapferer's Model.
Unit 13	**Brand Positioning and Re-positioning-** Module Overview, Brand Positioning, Brand Positioning Basics, Brand Positioning Statement- Guidelines, Brand Re-positioning, Brand Positioning vs. Product Positioning.
Unit 14	**Brand Communication, Brand Knowledge:** Awareness & Image, The Importance of Communication, Brand Awareness, Brand Image.

References:

1. *Brand Management: Principles and Applications for Effective Branding*, Jaywant Singh and Paurav Shukla, 2024.
2. *Advertising and Brand Management*, Alvirakumari A. Rajwadi, Dilip R. Vahoniya and Prakashkumar H. Patel, 2025.
3. *B2B Brand Management*, Philip Kotler and Waldemar Pfoertsch, 2025.
4. *Designing Brand Identity*, Alina Wheeler and Rob Meyerson, 2024.

5.3. Duration of the programme

Programme	**Level**	**Duration**	**Maximum duration for completion**	**Credits**
MBA	Master's Degree	2 years	(2+ 2) years (As per UGC Notification on Specification of Degree, 2014)	90 Credits

5.4. Faculty and support staff requirement

Academic Staff	**Number available to meet the required delivery norms**
Programme Coordinator	1 member
Course Coordinator	1 member
Course Mentor	1 member per batch of 250 students

5.5. Instructional delivery mechanisms

The Centre for Distance and Online Education of MUJ comprises of faculty members and staff who are well versed in Distance Education and Online delivery.

An Academic calendar depicting dates for all major events during each semester will be prepared by faculty members and shared with students through LMS, at the beginning of each academic session.

Apart from providing content in the form of Self Learning Material, enough e-learning resources in the form of Audio and Video content will be provided to students. Regular engagement of students will be ensured through the following means:

- Conduct of Webinars/live lectures/online lectures/Virtual Class
- By encouraging them to participate in mandatory Discussion Forums to stimulate their thinking, and to be able to fearlessly express their views in forums. These discussion forums will be moderated by faculty to provide equal opportunity for everyone to participate, as well as to ensure maintenance of decorum of the forum.
- Through periodic formative assessments

Regular evaluation of content learnt will be provided for, through Self-Assessment Questions within the SLM, as well as quizzes on the LMS. The quizzes can be taken any number of times, so that they reach a stage of being able to answer questions without errors, which is a reflection of their understanding of the concept. .

Effort will be made to provide case studies to enhance their analytical ability and make right decisions.

Link to National Portals (SWAYAM/NPTEL) will be provided, as also link to University's digital library portal.

All links to additional reading will be provided in the LMS. Interested students can study beyond the confines of the syllabus.

5.6. Identification of media–print, audio or video, online, computer aided

LMS provides for all audio video content (e-learning material, e-pubs, faculty-led video sessions, virtual classrooms and discussion boards), dashboard of their progress in learning, comparison with their peers in terms of learning, regular notifications regarding upcoming Webinars/virtual classes, Assignments, Discussion Forum participations and Examinations. It also provides an opportunity for raising queries if any, and seek answers to the same, by chat bot or course mentors.

5.7. Student Support Services

The Student Support services will be facilitated by the Centre for Distance and Online Education, Manipal University Jaipur, Rajasthan which includes the pre-admission student support services like counselling about the programme including curriculum design, mode of delivery, fee structure and evaluation methods. Post-admission student support services include guiding students towards accessing e-identity card, LMS portal, Academic calendar and academic delivery. Examinations support staff shall answer queries pertaining to conduct of end-semester examinations, evaluation and issue of certificates.

6. Procedure for Admission, Curriculum Transaction and Evaluation

The purpose of Online education by Manipal University Jaipur is to provide flexible learning opportunities to students to attain qualification, wherever learners are not able to attend the regular classroom teaching. Academic programmes offered for such candidates under Online Learning mode will be conducted by Centre for Distance and Online Education-Manipal University Jaipur with support of the various University schools. The programmes/courses may be termed Online mode for award of Degree. Eligibility criteria, programme/course structure, curriculum, evaluation criteria and duration of programme shall be approved by Board of Studies and Academic Council which are based on UGC guidelines.

Candidates seeking admissions in any programme offered by Centre for Distance and Online Education-Manipal University Jaipur shall fill up online application form available on CDOE-MUJ website. Before applying, candidates must check eligibility criteria for programme that they are interested in. Details about Eligibility criteria, programme structure, curriculum, duration, and fee structure are available on the website.

6.1. Procedure for Admission

6.1.1 Minimum Eligibility Criteria for admission

- Candidate must have a 10 + 2 + 3 years bachelor degree or equivalent qualification as recognized by Association of Indian Universities (AIU) or other competent body in any discipline from a recognized University/Institution with a minimum of 45% (40% for Reserved category) marks in aggregate, and valid score from any relevant recognised aptitude test (CAT/MAT/CMAT/XAT/GMAT).

- Note: Candidates without aptitude test score need to appear and clear online Aptitude test conducted by Manipal University Jaipur as per admission Norms to MBA Programme.

Important Instructions:

- All admissions shall be provisional until and unless candidates meet the eligibility criteria.
- Admission will stand cancelled if a candidate CDOEs not meet eligibility criteria, or there is failure to pay programme/course fees.
- Admission will stand cancelled, if candidate CDOEs not submit proof of eligibility within stipulated time given by Centre for Distance and Online Education-Manipal University

  Jaipur.
- Centre for Distance and Online Education-Manipal University Jaipur has the right to make necessary changes from time to time as deemed fit in Eligibility criteria, programme/course structure, curriculum, duration, fee structure and programme announcement dates. All changes will be notified on website.
- Candidates should carefully read all instructions given in Programme prospectus before start of application form.

6.1.2. Fee Structure and Financial assistance policy

Suggested Fee for MBA programme is INR 1,75,000/- (One Lakh Seventy Five Thousand only).

Overseas students need to remit equivalent of 2692 in USD to University for Non-Resident Indians), 3140 USD for Foreign Nationals and 2360 USD for African Students.
A scholarship of upto 20% on tuition fees will be provided to Divyang students and students from Public Sector Undertaking / Defence background.

6.2. Curriculum Transactions

6.2.1. Programme Delivery

Manipal University Jaipur has state-of-the-art mechanism for online mode of Academic delivery to ensure quality education. Faculty members at MUJ offer expert guidance and support for holistic development of the students. Faculty members are not mere facilitators of knowledge but they also mentor students to make learning more engaging and maintain high retention level. The programme will be delivered with an aim to provide expertise and ensure that students excel in their domains. The features of programme delivery are:

- Online Mode of Academic Delivery
- Periodic review of Curriculum and Study material
- Live Interactive lectures from faculty / Course coordinators
- Continuous Academic and Technical support
- Guidance from Course Co-ordinators
- Learning and delivery support from Course Mentors

6.2.2. Norms for Delivery of Courses in Online Mode

S. No.	**Credit value of the course**	**No. of Weeks**	**No. of Interactive Sessions**		**Hours of Study Material**		**Self-Study hours including Assessment etc.**	**Total Hours of Study (based on 30 hours per credit)**
			Synchronous Online Counselling/ Webinars/ Interactive Live Lectures (1 hour per week)	**Discussion Forum/ asynchronous Mentoring (2 hours per week)**	**e-Tutorial in hours**	**e-Content hours**		
1.	2 Credits	6 weeks	6 hours	12 hours	10	10	22	60
2.	4 Credits	12 weeks	12 hours	24 hours	20	20	44	120

6.2.3**.** Learning Management System to support Online mode of Course delivery

LMS Platform has been built to help learners reach their potential in their chosen programme. It is a secure, reliable learning experience tool that works consistently on Web and Mobile devices. Its simple interface makes it easy for instructors to design courses, create content and grade assignments. It provides a great mobile experience due to the responsive design which is paired with purpose-built native apps. It provides seamless accessibility to ensure all tools are standards-compliant and easy for students to navigate using assistive technologies. It provides

24 X 7 learning experience to facilitate learning as per the pace chosen by learners. Digital portfolio functionality allows students to document and share their learning journey as it happens, on both web and mobile platforms.

6.2.4. Course Design

The Course content is designed as per the SWAYAM guidelines using 4-quadrant approach as detailed below to facilitate seamless delivery and learning experience

(a) Quadrant-I i.e. e-Tutorial, that contains – Faculty led Video and Audio Contents, Simulations, video demonstrations, Virtual Labs

(b) Quadrant-II i.e. e-Content that contains - Portable Document Format or e-Books or Illustration, video demonstrations, documents as required.

(c) Quadrant-III i.e. Discussion forums to raise and clarify doubts on real time basis by the Course Coordinator and his team.

(d) Quadrant-IV i.e. Self-Assessment, that contains MCQs, Problems, Quizzes, Assignments with solutions and Discussion forum topics.

6.2.5. Academic Calendar

Sl No.	Event	Batch	Last Date (Tentative)
1	Commencement of semester	January	1st January
		July	1st July
2	Enrol student to Learning Management system	January	Within 2 working days of fee confirmation
		July	
3	Assignment Submission	January	March end and April end
		July	September end and October end
4	Submission of Synopsis (Applicable during Pre final semester)	January	30th April
		July	30th October
5	Project Report Submission (Applicable during Final semester)	January	30th April
		July	30th October
6	Webinars / Interactive Live Lectures and Discussion Forum for query resolution	January	Mar to May
		July	September to November
7	Admit Card Generation	January	3rd week of May
		July	3rd week of Nov

8	Term End Examination	January	2nd week of June (TEE June)
		July	2nd Week of December (TEE December)
9	Result Declaration of End Term Examination	January	Last week of August
		July	Last week of February

6.3. Evaluation

The students' learning in a course would be evaluated based on Internal assignments, students' response sheets, and semester end examinations. University adopts rigorous process in development of question papers, question banks, assignments and their moderation, conduct of examinations, evaluation of answer scripts by qualified teachers, and result declaration. The Directorate shall frame the question papers so as to ensure that no part of the syllabus is left out of study by a learner.

The evaluation shall include two types of assessments-continuous or formative assessment in the form of assignments, and summative assessment in the form of end semester examination or term end examination which will be held with technology supported remote proctored examination tool.

However, we shall be considering the guidelines issued by the Regulatory bodies from time-to-time about conduct of examinations.

The examinations shall be conducted to assess the knowledge acquired during the study. There shall be two systems of examinations viz., internal and external examinations. In the case of theory courses, the internal evaluation shall be conducted as Continuous Internal Assessment via Student assignments preparation, quizzes. The internal assessment shall comprise of maximum of 30 marks for each course. The end semester examination shall be of three hours duration for each course at the end of each semester.

6.3.1. Question Paper Pattern

Time: 3 Hours

Max. Marks: 70

Part A - (Multiple Choice Questions) - 10 x 2 Marks = 20 Marks

Part B - (Short Answers) - Answer any 4 (out of 6) 4 x 5 Marks = 20 Marks

Part C – (Long Answers) – Any 3 (out of 4) x 10 Marks = 30 Marks

6.3.2. Distribution of Marks in Continuous Internal Assessments

The following procedure shall be followed for awarding internal marks for theory courses. Student must submit two assignments each carrying 30 marks and average of both will be considered as internal assessment marks.

6.3.3. Passing Minimum

The students are considered as passed in a course if they score 40% marks in the Continuous Evaluation (IA) and Term-End Examinations (TEE) individually. If a student fails in any one component (failure to get 40% marks either in IA or TEE), then he/she will be required to re-appear for that component only (IA or TEE as the case may be).

6.3.4. Marks and Grades

Based on the total marks obtained for each course in Internal Assessment and Term End examinations, student will be awarded grade for that course. The following table gives the marks, grade points, letter, grades and classification to indicate the performance of the candidate.

Range of Marks	**Grade Points**	**Letter Grade**	**Description**
≥90 to ≤100	10	A+	Outstanding
≥80 to <90	9	A	Excellent
≥75 to <80	8	B+	Distinction
≥70 to <75	7	B	Very Good
≥60 to <70	6	C+	Good

≥50 to <60	5	C	Average
≥40 to <50	4	D+	Below Average
<40	0	F	Re-appear
ABSENT	0	AAA	ABSENT

For a semester:

Grade Point Average [GPA] = $\sum_i C_i G_i / \sum_i C_i$

Grade Point Average =

$$\frac{\text{Sum of the multiplication of grade points by the credits of the courses}}{\text{Sum of the credits of the courses in a semester}}$$

C_i = Credits earned for the course i in any semester
G_i = Grade Point obtained for course i in any semester.

n refers to the semester in which such courses were credited

For the entire programme:

Cumulative Grade Point Average [CGPA] = $\sum_n \sum_i C_{ni} G_{ni} / \sum_n \sum_i C_{ni}$

$$\text{CGPA} = \frac{\text{Sum of the multiplication of grade points by the credits of the entire programme}}{\text{Sum of the credits of the courses for the entire programme}}$$

7. Requirement of the Laboratory Support and Library Resources

7.1. Laboratory Support

No lab based courses are offered in this program.

7.2. Library Resources

Centre for Distance and Online Education, Manipal University Jaipur , Rajasthan has excellent Library facility with adequate number of copies of books in relevant titles for MBA programme. The Central Library of Manipal University Jaipur is also having good source of reference books. The books available at both the libraries are only for reference purpose and lending services. In addition, reference books as prescribed will be procured. The Digital library access will also be made available to students who are enrolled into online mode of education. In addition, the university membership on Swayam/ NPTEL/ Knimbus will also be made available to students. Complete e-Learning resources to course would be made available on Learning Management System for learning along with e-tutorial lectures. Further, expert lectures/workshops/ webinars by industry experts would also be conducted for the students.

8. Cost Estimate of the Programme and the Provisions

The cost estimate of the Programme and provisions for the fund to meet out the expenditure to be incurred in connection with MBA Programme as follows:

Sl. No.	Expenditure Heads	Approx. Amount
1	Programme Development (Single Time Investment)	82,00,000 INR
2	Programme Delivery (Per Year)	9,00,000 INR
3	Programme Maintenance (Per Year)	42,00,000 INR

9. Quality assurance mechanism and expected programme outcomes

The quality of the programme depends on scientific construction of the curriculum, strong-enough syllabus, sincere efforts leading to skilful execution of the course of the study. The ultimate achievement of MBA programme of study may reflect the gaining of knowledge and skill in management area. Gaining of knowledge and skills in IT may help the students to get new job opportunities, upgrading their position not only in employment, but also in the society.

The benchmark qualities of the programme may be reviewed based on the performance of students in their end semester examinations. Also, the feedback from the alumni, students, parents and employers will be received and analysed for further improvement of the quality of the programme.

Manipal University Jaipur has constituted Centre for Internal Quality Assurance (CIQA), which will assist Director, Centre for Distance and Online Education to conduct periodic review and assessments and assist the Directorate to implement necessary quality measures and effectiveness in programme delivery. CIQA is constantly involved in reviewing all materials prepared by CDOE, including syllabus, SLMs and e-learning content. CIQA will be involved in conducting studies to measure effectiveness of methods adopted for learning. As we proceed further, CIQA will involve in benchmarking quality of academic delivery, and perform various analyses, and guide all stakeholders towards upgrading quality constantly.

Centre for Internal Quality Assurance Committee (CIQAC) chaired by the Vice Chancellor consisting of internal and external experts oversees the functioning of Centre for Internal Quality Assurance and approve the reports generated by Centre for Internal Quality Assurance on the effectiveness of quality assurance systems and processes.

In addition to CIQA, as per the guidelines of National Assessment and Accreditation Council (NAAC), Manipal University Jaipur has constituted Internal Quality Assurance Cell (IQAC), in which academicians, industry representatives and other stakeholders are nominated as members. The IQAC is a part of the institution's system and work towards realisation of the goals of quality enhancement and sustenance, as quality enhancement is a continuous process. The prime task of the IQAC is to develop a system for conscious, consistent, and catalytic improvement in the overall performance of institutions. The work of the IQAC is the first step towards internalization and institutionalization of quality enhancement initiatives. IQAC's elementary motive is to promote measures for institutional functioning towards quality enhancement through internalization of quality culture and institutionalization of best practices.

The guidelines on quality monitoring mechanism prescribed by the UGC have been adopted by the Centre for Internal Quality Assurance for conducting institutional quality audits, to promote quality assurance and enhance as well as spread best-in-class practices of quality assurance. University has setup an effective system for collecting feedback from the stakeholders regularly to improve its programmes. The University will conduct self-assessments regularly and use the results to improve its systems, processes etc. and finally quality of programmes.