THIRD SEMESTER

Summer Training Project

Course Code: MS 201 Credits – 4

Course Outcomes:

CO1: Integrate academic theory with practice.

CO2: Develop self-confidence, sensitivity and appreciation for diversity, clarification of work and personal values, and workplace etiquette.

CO3: To apply knowledge and skills learned in company/industry/organization to real-world problems

CO4: Develop and demonstrate workplace competencies such oral and written communication, critical thinking, organization, problem solving, decision making, leadership, managing interpersonal relationships, etc. necessary for professional success.

CO5: Carry out research projects, analyze data, and write up and present results in meetings (including experience in using specialized tools at each stage of this process).

All the students will submit their Summer Training Project (in duplicate) within a period of one month from the date of completion of their Summer Training to the concerned Institute/School. The supervisor in the organization under whose guidance the summer training is carried out will be required to grade the student's performance in the format prescribed by the university, attached below. Each student will be attached with one internal faculty guide, with whom he/ she shall be in continuous touch during the training period. The internal faculty guide will be required to evaluate the report (out of 40 marks) on the basis of the assessment report provided by the organization where the Summer Training has been completed and his/her own assessment about the work done by the student. The evaluation for the remaining 60 marks shall be made by an external examiner appointed by the University who shall evaluate the report on the basis of a presentation and the assessment report received from the organization where the student has undergone Summer Training.

CO-PO Mapping

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9
CO1	3	3	3	3	3	3	2	3	3
CO2		2	2	3	3	2	2	3	3
CO3	3	3	3	3	3	3	3	3	3
CO4	3	3	3	3	3	2	3	3	3
CO5	2	3	2	3	3	3	2	3	3

Management of International Business

Course Code: MS 203 L - 3, Credits - 3

Objective: This course aims to introduce students to various facets of international business. Students should understand the theories of international business and environmental factors affecting international activities and apply the learning to manage functional operations in a global context.

Course Outcomes:

CO1: Develop an understanding of the global business environment in terms of economic, socio-cultural, political, technological and legal aspects.

CO2: Absorb insights of the international aspects of strategic management, global talent management, finance, marketing, e-commerce, organization and design of multinational corporations

CO3: Learn the knowledge and skills necessary to function successfully in the diverse international business environment, with the ability to contribute to the innovation processes.

CO4: Apply the knowledge of cross cultural issues for effectively managing international business negotiations

CO5: Appreciate the underlying global public issues of ethical, sustainable and socially responsible conduct of business in the business operations of MNCs for effective decision making

Course Content

Unit I

Introduction to International Business: Driving Forces of Globalization, Reasons for Going International, E.P.R.G. Framework, The Environment of International Business, Cross-Cultural Management: Hofstede Study, Edward T Hall Study, Analyzing International Entry Modes, Entry Barriers, International Trade Theories, Regional Economic Integration.

(11 hours)

Unit II

Formulating & Implementing Global Strategy: Organization Design & Structures, International Competitive Advantage, International Strategic Alliances, Global Mergers and Acquisition, Managing innovations and Intellectual Property Rights. (10 Hours)

Unit III

Managing Globally: Global Marketing Management, Outsourcing and Logistics, Global Operations Management & Supply Chain Management, Global Talent Management, Aspects of Global Financial Management. (10 Hours)

Unit IV

Broad Issues in Globalization: E-Commerce, Ethics, Corporate Social Responsibility and Sustainability dimensions of International Business, The Social Responsibility of the Global Firm, International Negotiations and Cross-Cultural Communication, Future of International Business and other emerging concepts. (11 hours)

Suggested Readings: (Latest Editions)

- 1. Daniels John, Radebaugh Lee, Sullivan Daniel, Salwan P. Click R.W., International Business Environments and Operations, Pearson Education.
- 2. Charles, W.L.Hill International Business: Competing in the Global Marketplace, McGraw-Hill/Irwin
- 3. Luthans Fred & Doh Jonathan, , International Management: Culture, Strategy, and Behavior, Mc McGraw-Hill Education.
- 4. Mike W. Peng, Deepak K. Srivastava, Global Business Cengage India
- 5. Michael R. Czinkota, Ilkka A. Ronkainen, Suraksha Gupta, International Business, Cambridge University Press
- 6. Cavusgil, S. T., Knight, G., Riesenberger, J. R., International Business: The New Realities. Pearson Education

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9
C01	2	3		1			2		1
C02	3		3		3	2	2	2	1
C03			2	2	2		2		3
C04		3						3	2
C05		1	2	3			3		

Managing E- Business

Course Code: MS 205 L-3, Credits -3

Objective: The course imparts understanding of the concepts and various application issues of e-business such as internet infrastructure, security over internet, electronic payment systems and various online strategies for e-business.

Course Outcomes:

- CO 1: Understanding the concepts of electronic business and electronic commerce and related tools and techniques.
- CO 2: Identifying various security issues and measures for any online digital medium
- CO 3: Understanding about latest innovation in field of Electronic payment systems.
- CO 4: Understanding of latest trends in electronic commerce and learning it's ethical, societal, legal impacts.

Course Content

Unit I

Introduction to e-business: Electronic Business, Electronic Commerce, Types of Electronic Commerce, Limitations and Barriers of E-commerce, Electronic Commerce Models, Electronic Commerce in India, Impact of Electronic Commerce on different Industries, Electronic Commerce technologies, Usage and Application of Electronic Commerce technologies in Business. (10 Hours)

Unit II

Security Issues in e-business: Security Overview, Electronic Commerce Threats, Encryption, Cryptography, Public Key and Private Key Cryptography, Digital Signatures, Digital Certificates. Securing Electronic commerce Networks: Security Protocols, HTTP, SSL, Firewalls, IDS, VPNs, Public Key Infrastructure (PKI) for Security. (11 Hours)

Unit III

Electronic Payment System: Concept of Electronic Money, Concept of Electronic Payment System, Types of Electronic Payment Systems, Credit & Debit Cards, Smart cards, RuPay cards, Electronic wallets, Payment Gateways, Infrastructure Issues in Electronic Payment Systems, Electronic Fund Transfer. (10 Hours)

Unit IV

E-Business Applications & Strategies: Business & Revenue Models over Internet, Emerging Trends in E-Business, Digital Commerce, Mobile Commerce: Concepts, Benefits and Models, Emerging Trends in Mobile Apps; Internet based Business Models, Legal and Ethical Issues of E-Commerce. (11 Hours)

Suggested Readings: (Latest editions)

- 1. Dave Chaffey, E-Business and E-Commerce Management- Strategy, Implementation and Practice, Pearson Education.
- 2. Bharat Bhaskar, Electronic Commerce- Framework, Technologies and Applications, Tata McGraw Hill.
- 3. Efraim Turban, David King, Dennis Viehland, Jae Lee, Electronic Commerce A Managerial Perspective, Pearson Education.
- 4. Elias M. Awad, Electronic Commerce- From Vision to Fulfillment, PHI Learning.
- 5. Joseph, P.T. and S.J., E-Commerce An Indian Perspective, PHI Learning.
- 6. Schneider Gary P. and Perry, James T, Electronic Commerce Strategy, Cengage Learning.

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9
CO1	3	3	2	2	2	1	1	1	2
CO2	2	3	2	2	1	1	1	1	1
CO3	2	2	2	2	1	1	1	1	2
CO4	3	3	2	2	2	3	2	2	1

Entrepreneurship Development & Startup

Course Code: MS 207 L - 3 Credits - 3

Objective: The course aims at inculcating entrepreneurial skills in the students by giving an overview of who the entrepreneurs are and what competencies are needed to become an entrepreneur. The course aims to inspire students to establish and manage their own firm.

Course Outcomes:

CO1: Demonstrate an understanding of and appreciation for the characteristics of successful entrepreneurs and their role in economic development of a nation

CO2: Analyse the industry and competitors of any firm and creatively write an effective business plan

CO3: Understand essential knowledge of how to start one's own business by assessing business viability on various parameters including support from the government

CO4: Identify key drivers of growth in a venture and determine how to strategize and run a start-up in the long run

Course Content

Unit I

Introduction to Entrepreneurship: Types of Entrepreneurs; Entrepreneurial Competencies; Factors Affecting Entrepreneurial Growth – Economic, Non-Economic Factors; Entrepreneurship and Economic Development; EDP Programmes (12 hours)

Unit II

Developing successful Business Ideas: Recognizing Opportunities and Generating Ideas, Feasibility Analysis; Developing an Effective Business Model; Industry and Competitor Analysis; Writing a Business Plan (12 hours)

Unit III

Moving from an Idea to an Entrepreneurial Firm: Assessing a New Venture's Financial Strength and Viability; Building a New-Venture Team; Getting Financing or Funding; Role of Support Institutions in India (9 hours)

Unit IV

Managing and Growing an Entrepreneurial Firm: Unique Marketing Issues, preparing for and Evaluating the Challenges of Growth; Strategies for Firm Growth (9 hours)

- 1. Bruce R. Barringer & R. Duane Ireland. Entrepreneurship: Successfully launching new ventures. Pearson
- 2. Kuratko, D.F. & Hodgetts, R.M. Entrepreneurship: Theory, Process and Practice. Thomson Press
- 3. Charantimath, P. Entrepreneurship Development: Small Business Enterprises. Pearson
- 4. Ali J. Ahmed, Punita Bhatt & Iain Acton. Entrepreneurship in Developing and Emerging Economies. Sage
- 5. Robert D Hisrich & Michael P. Peters. Entrepreneurship. McGraw Hill

6. Rajeev Roy. Entrepreneurship. Oxford

	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9
CO 1	2	3	1	2	1	1	2	3	2
CO 2	3	3	3	3	3	2	2	2	3
CO 3	3	3	2	3	3	2	2	3	3
CO 4	3	3	3	3	3	2	2	3	3

Strategic Management

Course Code: MS 209 L-3, Credits -3

Objective: The course is aimed at providing exposure and making the students aware about the role of strategic management in business enterprises and government enterprises.

Course Outcomes:

CO1: Understand the integrative model of strategic management process along with role of corporate governance in strategic management.

CO2: Demonstrate the knowledge in formulating strategies along with identifying the resource endowments specific to the firm & industry.

CO3: Implement a strategic plan that takes into account the functional areas of business along with procedures in order to achieve organizational goals.

CO4: Evaluate challenges faced by managers in implementing and evaluating strategies based on the nature of business. industry, and cultural differences.

Course content

Unit I

Introduction to Strategic Management: Definition of Strategic Management, Nature of Strategic Management, Dimensions of Strategic Management, Need for Strategic Management, Strategic Management – Process, Vision, Mission and Business Definition Models of Strategic Management: Mintzberg, Ansoff, Porter, Prahalad and Gary Hammel, McKinsey's 7'S Framework: A Tool to Evaluate and Control an Organisation. (10 Hours)

Unit II

Strategic Management in Global Environment: Need for Globalization, Different Types of International Companies, Development of a Global Corporation, Complexity of Global Environment, International Culture, Implementing Global Strategies

Competitive Analysis: Competitor Analysis Framework, Rivalry Analysis, Competitive Dynamics, Competitive Rivalry

Industry Analysis: Formulation of Strategy, Five Competitive Forces that Shape Strategy, PESTLE Analysis, Competition and Value, Industry Structure, Technology Lifecycle, Industry Analysis in Practice, Defining the Relevant Industry

Strategic Management Process: Purposes of Strategic Management Process, Steps involved in the Strategic Management Process, Strategic Management Process, Strategy Formulation, Constraints and Strategic Choice, Strategy Implementation, Strategic Control and Assessment (10 Hours)

Unit III

Formulating Corporate-Level Strategy: Balanced Score Card: A Balanced Approach, Grand Strategies: Strategic Alternatives, Growth/Expansion Strategy, Diversification Strategy, Stability Strategy, Retrenchment Strategy, Turnaround Strategies, Combination Strategies

Formulating Business Level Strategy: Porter's Competitive Strategies, Competitive Advantage, Competitive Advantage Factors, How to Build or Acquire Competitive Advantage? Acquiring Core Competence, Low Cost Strategies, Differentiation Strategies, Focus Strategies.

(10 Hours)

Unit IV

Analyzing Resources and Capabilities: Factors affecting the Internal Environment, Resources and Capabilities as Sources of Profit, Resources of the Firm, Organizational Capabilities, Appraising Resources and Capabilities, Putting Resource and Capability Analysis to Work, Developing Resources and Capabilities

Formulating Functional Level Strategy: Putting Strategy into Action, Structural Design, Information and Control System, Human Resources

Corporate Goals and Strategic Gap: Corporate Goals, Strategic Gap, Porter's Generic Strategies

Managing Internal Organization for Strategy Implementation: Issues in Strategy Implementation, Strategy–Structure Relationship, Divisionalisation: Product and Geographic Forms, Diversification, Strategic Business Units (SBUs), Project Organisation, Matrix Organisation Structure, New Design Options, Factors Influencing Organisation Structure, Structure and Strategy Implementation. (12 Hours)

Suggested Readings (Latest Edition)

- 1. Strategic Management Concepts: A Competitive Advantage Approach, Fred R. David, Pearson Education
- 2. Strategic Management and Business Policy: Globalization, Innovation and Sustainability, Thomas L Wheelen, J. David Hunger and Krish Rangarajan ,Pearson Education,
- 3. Strategic Management: An Integrated approach, Hill W.L. Charles & Jones R. Gareth
- 4. Business Policy and Strategic Management, Azhar Kazmi, Tata McGraw Hill
- 5. Strategic Management -The Indian Context, R.Srinivasan, Prentice Hall of India
- 6. Business Strategy: Managing Uncertainty, Opportunity, and Entreprise, J.C.Splender, Oxford University Press

	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9
CO 1	3	2	2	2	2	1	1	2	1
CO 2	3	2	2	2	1	1	2	1	2
CO 3	2	3	2	2	1	2	3	2	1
CO 4	1	2	2	1	2	1	2	2	1

Business Analytics

Course Code: MS 211 L - 2 Credits - 2

Objective: The objective of this course is to introduce students to the capabilities and applications of business analytics.

Course Outcomes

CO1: Develop an understanding of business analytics and its models for problem solving

CO2: Learn data visualization and validation techniques for effective data presentation and management

CO3: Understand how to treat data for errors so as to analyse management problems correctly and create effective solutions

CO4: Be able to apply predictive analysis tools to solve organizational problems using a systematic and analytical decision-making approach

Course Content

Unit I

Introduction to Business Analytics: Concept and Scope, Importance of data in Business, Decision Models-Concept and Types, Analyst's role in the Business Analytics Model.

(4 Hours)

Unit II

Exploring Data and Data Visualization: Exploring data using Pivot Tables, Pivot Charts, Look-up functions, Data Validation and whatif analysis functions in spreadsheets for data visualization. Introduction to Google Dashboards and Power BI. (7 Hours)

Unit III

Data Preparation: Treatment of Missing Values, Identification and management of Outliers & erroneous data.

Data Warehousing: Need for a data warehouse. ETL processes, Data Quality: Cause and Effect of Poor Data Quality, Alternative Ways of Storing Data, Master data management.

(7 hours)

Unit IV

Predictive Modelling and Analysis: Logic driven modelling, strategies for building predictive models, data-driven modelling, Supervised learning, regression-simple, multiple and logistic regression.

Data Reduction Techniques: Principal Component Analysis, Clustering Analysis: k-Nearest Neighbors. (10 Hours)

- 1. Evans, J.R. Business Analytics. Pearson
- 2. RN Prasad and Seema Acharya. Fundamentals of Business Analytics, Wiley, India.
- 3. Purba Halady Rao. Business Analytics: An Application Focus, PHI.
- 4. David Roi Hardoon and Galit Shmueli. Getting Started with Business Analytics: Insightful Decision-Making, CRC Press, Taylor & Francis Group.
- 5. Gert H.N. Laursen and Jesper Thorlund. Business Analytics for Managers: Taking Business Intelligence Beyond Reporting, Wiley.

6. Mize, Edward. Data Analytics: The Ultimate Beginner's Guide to Data Analytics, Createspace Independent Publishing

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9
CO1	3	2	1	2	3	3	2	3	3
CO2	3	3	1	2	3	3	2	3	3
CO3	3	3	1	1	3	3	2	3	3
CO4	3	3	1	2	3	3	2	3	3

Consumer Behaviour

Course Code: MS 213 L3: Credits-3

Objective: This course aims at enabling students to understand the various aspects of consumer behaviour, the external and internal factors that influence consumer behaviour and to apply this understanding to the development of marketing strategy.

Course Outcomes:

CO1: Demonstrate an understanding of the importance of studying consumer behaviour and its relevance to decisions in marketing, public policy and social and economic spheres.

CO2: Demonstrate an understanding of the consumer decision-making process and the internal and external determinants that influence this process.

CO3: Apply the various research tools and techniques to gain insights into consumer behaviour.

CO4: Demonstrate the ability to develop creative marketing strategies and solutions based on an understanding of the consumer behaviour of the relevant target groups.

Course Content

Unit I

Introduction to Consumer Behavior: Scope and Relevance of Consumer Behaviour Studies; Approaches to studying Consumer Behaviour; Consumer Journey Map: Problem Recognition, Information Search, Alternative Evaluation-Decision Rules- and Purchase, Outlet Selection, Post Purchase Behavior and Customer Satisfaction; Types of Buying Behaviour, Role of Involvement; Models of Consumer Behavior; Understanding Online Consumer Behaviour. (10 Hours)

Unit II

Individual Determinants of Consumer Behaviour: Motivation; Attention, Perception and Consumer Imagery; Learning and Memory; Personality and Self Concept; Consumer Attitudes – Formation and Change; Consumer Values and Lifestyles. (12 Hours)

Unit III

External Determinants of Consumer Behaviour: Influence of Culture and Subculture; Social Class; Reference Groups, Word of Mouth & Opinion Leadership; Family Influences; Online Social Influences: Social Media & eWom. (10 Hours)

Unit IV

Consumer Behaviour -Related and Emerging Issues: Diffusion of Innovation: Researching Consumer Behaviour; Measuring Customer Satisfaction; Consumer Behaviour and Public Policy; Dark Side of Consumer Behaviour. (10 Hours)

- 1. Schiffman, L.G, Wisenblit, J. & Ramesh Kumar S., Consumer Behaviour, Pearson Education, India.
- 2. Hawkins, D.I, Mother & Baugh, D.L.& Mookerjee A., Consumer Behaviour- Building Marketing Strategy, Mc Graw Hill Education

- 3. Solomon, Michael R., Consumer Behaviour: Buying, Having and Being, Pearson Education, India.
- 4. Sharma D, Sheth J. N. & Mittal B., Consumer Behaviour: A Managerial Perspective, Cengage Learning, New Delhi.
- 5. Babin, B. J., Harris, E.G. & Mohan, A., Consumer Behavior: A south Asian Perspective, Cengage Learning India Pvt. Ltd, New Delhi.
- 6. Sethna, Zubin., Blythe, Jim., Consumer Behaviour, Sage Publishing.

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9
CO1	3	3	3	1	2	1	1	2	3
CO2	3	3	2	2	3	1	2	2	3
CO3	3	3	2	1	3	2	1	1	3
CO4	3	3	3	2	3	3	3	2	3

Sales and Distribution Management

Course Code: MS 215 L-3 Credits-3

Objective: The course aims to impart the knowledge and skills needed to manage the sales force and distribution functions in a business organization so as to help gain a competitive advantage.

Course Outcomes:

CO1: Understand personal selling process. types of sales organizations, and analyse the role of sales strategies, territory allocation, and sales forecasting in sales management.

CO2: Understand the process of sales staffing and sales force management in a sales organization.

CO3: Analyse the role of retailers and wholesalers in the distribution process, and understand the steps in channel creation and management.

CO4: Differentiate between logistics, distribution, supply chain management and understand process of efficient physical distribution.

Course Content

Unit I

Introduction to Sales Management: Scope, Importance and Evolution; Marketing & Selling; Emerging trends in Sales Management; Personal Selling Process and Approaches; Sales Organization Structure; Sales Strategies, Sales Forecasting; Sales Territory Design.

(10 Hours)

Unit II

Sales Force Management: Salesforce Job Description; Salesforce Recruitment, Selection & Socialisation; Training Sales Personnel; Salesforce Motivation & Compensation; Sales Quotas and Contests; Evaluating Sales Performance; Salesforce Automation. (10 Hours)

Unit III

Distribution Planning and Control: Functions of Intermediaries; Types and Role of Channel Intermediaries in India for Consumer and Industrial Products: Channel Design; Channel Member Selection; Motivation and Evaluation of Intermediaries; Managing Channel Dynamics, Relationships and Channel Conflict; Wholesale and Retail Structure, Ethical and Legal Issues in Sales and Distribution Management in Indian context. (12 Hours)

Unit IV

Distribution System and Logistics: Physical Distribution System —Objectives and Decision Areas; Customer Service Goals; Logistics Planning; An overview of Transportation, Warehousing, Packing, Fleet Routing & Loading, and Inventory Decisions; Efficient Supply Chain Management (SCM); Sustainable Distribution; Integration of Sales and Distribution Strategy; Case Studies. (10 Hours)

Suggested Readings: (Latest Editions)

- 1. Still, R. R., Cundiff. E. W., Govoni, N., Sales Management Decision Strategies & Cases. Pearson Education.
- 2. Bert, R. (2004). Marketing Channels: A Management View., Cengage Learning, New Delhi.
- 3. Venugopal, P., Sales and Distribution Management: An Integrative Approach. SAGE Publications India.
- 4. Jobber, D., Lancaster, G., & Le Meunier-FitzHugh, K., Selling and Sales Management. Pearson UK..
- 5. Tanner, J., Honeycutt, E. D., & Erffmeyer, R. C., Sales Management. Pearson Higher Ed., Pearson Education, New Delhi.
- 6. Panda, T.K. and Sahadev, S., Sales and Distribution Management, Oxford University Press, New Delhi.

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9
CO1	3	2	2	3	2	3	2	2	3
CO2	3	3	2	2	3	2	2	2	2
CO3	3	3	3	3	3	3	1	2	2
CO4	3	3	3	3	3	3	2	1	3

Services Marketing

Course Code: MS 217 L-3 Credits- 3

Objective: This course aims at enabling students to apply marketing concepts and principles to the unique challenges and opportunities of services marketing to create customer value.

Course Outcomes:

CO1: Demonstrate an understanding importance of service marketing management for creating a culture of service in organizations and an awareness of the presence of the service element across the tangible- intangible product spectrum.

CO2: Apply the relevant principles and guidelines to the process of service positioning and the design, development and implementation of the services marketing mix.

CO3: Define and measure service quality and demonstrate an understanding of the causes for gaps between customer expectations and perceptions of services and ability to develop appropriate innovative solutions.

CO4: Demonstrate the ability to apply the concepts and principles of service marketing to develop creative service strategies across various service industries.

Course Content

Unit I

Introduction to Services Marketing: Meaning and Nature of Services, Challenges of Services Marketing, Growing Importance of Services Sector in India; Classification of Services and Marketing Implications; Services Marketing Management Process.

(10 Hours)

Unit II

Understanding Consumer Behavior in Services: Consumer Decision Making in Services, Managing Customer Expectations and Perceptions; Service Recovery; Defining and Measuring Service Quality and Customer Satisfaction, SERVQUAL, House of Quality, GAPs Model; (10 Hours)

Unit III

Services Marketing Mix: Service Positioning: Service Design and Development; Service Blueprinting; Service Process; Pricing of Services; Services Distribution Management; Integrated Services Communication Mix; Physical Evidence and Servicescape; Managing Service Personnel: Employee and Customer Role in Service Delivery. Customer Retention Strategies. (12 Hours)

Unit IV

Marketing Applications in Select Service Industries: Hospitality Services, Airlines, Tourism Services, Health Care and Wellness: Banking and Insurance Services, E-Learning Platforms. (10Hours)

- 1. Zeithaml V. A., Bitner M. J., Gremeler, D.D and Pandit, A., Services Marketing, McGraw Hill Education, India.
- 2. Lovelock C. H., Wirtz, J. and Chaterjee, J., Services Marketing: People, Technology, Strategy, Pearson Education, India.

- 3. Hoffman, K. D. & Bateson, J. E.G., Marketing of Services, Cengage Learning India Pvt. Ltd., India.
- 4. Kurtz D. L. and Clow K. E., Services Marketing. Biztantra, India.
- 5. Nargundkar, Rajendra, Services Marketing Text and Cases,. McGraw Hill Education, India.
- 6. Fitzsimmons, JA, and Fitzsimmons, M.J., Service Management: Operations, Strategy, and Information Technology, Mc Graw Hill Education, India.

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9
CO1	3	3	2	1	2	1	3	3	3
CO2	3	3	3	2	3	3	3	3	3
CO3	3	2	3	2	3	3	3	3	3
CO4	3	3	3	2	3	3	3	3	3

Customer Relationship Management

Course Code: MS 219 L - 3, Credits-3

Objective: This course is designed to expose the students to fundamental concepts of relationship management, its processes and its dynamics in organizations to retain the customers.

Course Outcomes:

CO1: To make the students understand the organizational need, benefits and process of creating long-term value for individual customers.

CO2: To disseminate knowledge regarding the concept of e-CRM and e-CRM technologies.

CO3: To enable the students understand the technological and human issues relating to implementation of Customer Relationship Management in the organizations.

CO4: Design customer relationship management strategies by understanding customers' preferences for the long-term sustainability of the Organizations.

Course Content

Unit I

Introduction to CRM: Definitions Importance, Elements of CRM, Phases in CRM Process, Models of CRM; eCRM; Relationships — Description, dynamics, Relationship Management theories; Developing CRM strategy, Relationship oriented organizations, Relationship Strategy; CRM Architecture. (10 Hours)

Unit II

Marketing Aspects of CRM: Data and Customer Knowledge; Communication channels for CRM — use and influence; Proposition for individual customer — Customisation of product and pricing; Organizational Relationship Policy—Segments and contact moments.

(10 Hours)

Unit III

Analytical CRM: Customer data Management, Data mining - Need, Value, Process and analysis; Designing loyalty program and measuring effectiveness; Retention and Cross selling; Customer Life time value calculations. (12 Hours)

Unit IV

Operational & System Implementation: Direct mail and call centers; Use of Internet for CRM; CRM Systems overview; Data warehouse & Data mart; CRM Roadmap-Project Management; Challenges & Emerging Trends in CRM. (10 Hours)

- 1. Peelen, E., Customer Relationship Management, Pearson Education.
- 2. Buttle, F., & Maklan, S. Customer relationship management: Concepts and technology. Sydney: a Butterworth-Heinemann Title, 72.
- 3. Swift R. S., Accelerating Customer Relationships: Using CRM and Relationship Technologies, Prentice Hall

- 4. Dyche J., The CRM Handbook A Business Guide to Customer Relationship Management. Pearson Education.
- 5. Kumar. V. Reinartz W. J., Customer Relationship Management: A Database Approach, Wily India.
- 6. Payne, A., & Frow, P., Strategic Customer Management: Integrating Relationship Marketing and CRM. Cambridge University Press.

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9
CO1	3	2	3	2	3	3	3	3	3
CO2	3	3	2	2	3	3	2	2	2
CO3	3	3	3	3	3	3	2	2	3
CO4	3	3	3	3	3	3	2	3	2

International Financial Management

Course Code: MS 221 L-3, Credits -3

Objective: The fundamental aim of this course is to develop the skills that equip students to understand and appreciate the international financial issues that companies face when they operate in several separate countries. The course encompasses various issues relates to international capital markets, foreign exchange rate determination and global financial management.

Course Outcomes:

CO1: Understand different exchange rate regimes, and systems across the globe

CO2: Analyze, apply and evaluate information within the global financial environment of foreign exchange to solve problems and make informed decisions

CO3: Recognize and calculate forward exchange rates given spot rates, identify market conventions on exchange rate quotation

CO4: Develop a sound understanding of the foreign exchange market and foreign exchange risk exposure

CO5: Analyze both quantitative and qualitative financial information to influence foreign investment decisions

Course Content

Unit I

Global Financial Environment: Overview, International Monetary System: Exchange Rate Regimes, IMF, Euro Currency Market, EURO Market, Capital Market. Balance of Payments: Understanding, Analysis & Interpretation. (10 Hours)

Unit II

Foreign Exchange Market: Nature, Structure, Types of transactions, Exchange rate quotation & Arbitrage, Spot & Forward. Foreign Exchange Market in India: Nature, Structure, Operations & Limitations. Exchange rate Determination: Structural Models of Exchange Rate Determination, Exchange Rate Forecasting, Exchange Rate of Rupee.

(12 Hours)

Unit III

Foreign Exchange Risk Exposure: Types of Risk, The Risk Management Process: Hedging, Swaps, Futures, Options, Role of Regulatory Bodies. (10 Hours)

Unit IV

Foreign Investment Decisions: International Project Appraisal, Exchange Rate Risk & Cost of Capital, International Joint Ventures, A review of NPV Approach. (10 Hours)

- 1. Eun, Cheol; and Resnick, Bruce, G. International Financial Management. McGraw Hill Education Private Limited.
- 2. Apte, P. International Financial Management. McGraw Hill Education Private Limited.
- 3. Levi, Maurice D, International Finance. Routledge.
- 4. Shapiro, Alan C, Multinational Financial Management. Wiley Publishers.

- Sharan, V, International Financial Management. Prentice Hall India. Siddaiah, T, International Financial Management: An Analytical Framework. Pearson.

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9
CO1	3	1		1	2	1			1
CO2	3	2	1	3	2				1
CO3	2	3	1	2	2	1	1		
CO4	3	3	2	1	1		1		2
CO5	3	3	3	3	3	1	1	2	3

Financial Markets and Institutions

Course Code: MS 223 L-3, Credits -3

Objective: To provide the student a basic knowledge of financial markets and institutions and to familiarize them with major financial services in India.

Course Outcomes:

CO1: The students will understand interrelationship of economic, commerce, financial markets and strategies for corporate decision making.

CO2: This course will help students develop understanding of foundations of financial markets and institutions.

CO3: They will learn tools and techniques for analysing market behaviour, impact of regulatory policies on changing decision making of companies and will be able to make strategies for investment.

CO4: The course is especially useful for those learners who want to get employed in financial sector or start entrepreneurial ventures as financial service provider as investment consultants, advisors and investment banking.

Course Content

Unit I

Financial Markets: Financial system and its components, functions; money market, instruments, types, regulations, Role of central bank in money market; capital markets, types, products, reforms; primary market, book building process; corporate debt market, financial markets and economic development; SEBI and recent reforms. (10 Hours)

Unit II

Banking Sector: Banking sector in India, role of RBI, commercial banks, committees, functions of a bank, products, assets and liabilities of banks; Non-performing assets, growth and performance of Indian banking sector; shadow banking, Fintech, digital currency, CBDC, E-banking, payment banks, financial inclusion, role and scope of payment banks, risks in banking- operational risk, credit risk, liquidity risk, financial stability, monetary policy, recent trends in banking sector. (12 Hours)

Unit III

Financial Institutions: Non-banking financial companies (NBFCs); Development Financial Institutions (DFIs); Mutual Funds, instruments, growth and performance of mutual funds; Life and non-life insurance companies in India, IRDA and recent reforms; Ministry of Corporate Affairs; Pension Fund Regulatory and Development Authority; Housing finance.

(10 Hours)

Unit IV

Financial Services: Merchant banking, Venture capital and private equity; Factoring; Credit rating agencies; Underwriting; Portfolio management; Project financing; Stock brokerage services; leasing and Hire-purchase; Recent developments. (10 Hours)

Suggested Readings: (Latest Editions)

- 1. Mishkin, F. S., & Eakins, S. Financial Markets and Institutions. Pearson Education.
- 2. Bharti Pathak. Indian Financial System. Pearson Education.
- 3. Bhasin, N. Financial Institutions & Financial Markets in India: Functioning & Reforms. New Century Publications.
- 4. Fabozzi., F. J. Bond Markets Analysis and Strategies. Pearson Education.
- 5. Khan, M. Y. Indian Financial System. McGraw Hill Education.
- 6. Krishnamurti, C. Mergers, Acquisition and Corporate Restructuring, Sage Publications

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9
CO1	3	3				3	2	1	3
CO2	3	3				3	3	3	3
CO3	1	1							3
CO4	2	2		2	3			3	2

Investment Analysis & Portfolio Management

Course Code: MS 225 L - 3 Credits - 3

Objective: The aim of the course is to acquaint the students with the concepts of investments and portfolio management. It aims to develop a practical orientation toward the principles of investment, pricing and valuation. The course provides a theoretical underpinning of the subject to enable the students to make investment-related decisions based on the trade-off between risk and return.

Course Outcomes:

CO1: Understand the risk and return relationship of financial market instruments and securities available for investment.

CO2: Apply the acquired knowledge of the security market for valuation of both equity and fixed income securities under goal-based investment planning.

CO3: Understand the concept and importance of portfolio management and develop skills for construction, evaluation and revision of portfolio.

CO4: Understand the various behavioural biases that impact investment decision making.

Course Content

Unit I

Introduction to Investment Environment: Concept, Nature and Scope, Features of Investment, Investment Process, Investment Avenues- Concept of Small, Mid, Large Cap, Penny stocks, Investment Environment, Financial Markets and Types, Intermediaries and the Role, Regulatory framework in the Financial Market, Investment Risks- Types- Systematic and Unsystematic Risk, Concept of Beta, Risk-Return Tradeoff, Techniques of Risk Measurement- Variance and Standard Deviation, Covariance and Coefficient of Determination, (12 Hours)

Unit II

Fundamental Analysis: Concept & significance of economic analysis, industry analysis: introduction, need for industry analysis, alternative classification of industry, industry life cycle analysis, economic factors & industry analysis, Company analysis - nature and style of management, key role of financial analysis, ratio analysis. Technical Analysis: line chart, bar chart, points and figures chart, candlestick chart, reversal patterns, continuation patterns, Dow Theory, Elliott wave theory. (10 Hours)

Unit III

Portfolio Management- Meaning and Process, Modern Portfolio Theory, Efficient Frontier, Efficient Frontier and Investor's Utility, Indifference Curve of an Investor, Equilibrium of an Investor, Single Index Model, Capital Market Theory, Capital Asset Pricing Model, Multifactor Models of Risk and Return: Arbitrage Pricing Theory, French and Fama Model, Portfolio performance evaluation- Sharpe's and Treynor's portfolio performance evaluation, Portfolio Alpha, Portfolio revision-Active and passive strategies. (12 Hours)

Unit IV

Capital Market Efficiency: Efficient Market Hypothesis, Forms of Market Efficiency, Measurement of Efficiency of the Financial Markets, Anomalies and Diversion from Efficiency, Behavioral Biases. (8 Hours)

Suggested Readings : (Latest Editions)

- 1. Chandra. Prasanna, Investment Analysis and Portfolio Management, Tata McGraw Hill, New Delhi.
- 2. Fischer, D.E, & Jordon, R.J. Security Analysis and Investment Management, Pearson Education.
- 3. Reilly, F., & Brown, K., Investment Analysis and Portfolio Management. Cengage Learning.
- 4. Rustagi. R. P., Investment Analysis and Portfolio Management, Sultan Chand & Sons.
- 5. Bhalla, V.K., Investment Management: Security Analysis and Portfolio Management, S.Chand& Sons.
- 6. Ranganatham, Madhumathi, R., Investment Analysis and Portfolio Management, Pearson Education.

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9
CO1	2	2	2	1	1				
CO2	3	3	1	3	3				
CO3	3	3	3	3	2				
CO4				3	2		2	1	2

Financial Econometrics

Course Code: MS 227 L-3, Credits -3

Objective: This course takes an intuitive approach to apply the techniques of econometrics for problem solving. The course aims at providing a hands-on practical approach for econometric tests, methods of estimation, and interpretation of the results to solve the business problems.

Course Outcomes:

CO1: Understand the nature and behaviour of time series data

CO2: Apply financial econometrics techniques on the real-life financial data.

CO3: Forecast the financial data, derive a relationship between two or more series for useful implications.

CO4: Validate financial theories and methods with the help of empirical data.

Course Content

Unit I

Financial Econometrics: Meaning, Nature, scope and methodology of Financial Econometrics, Types of Data, Returns in financial modelling, process of formulation of econometric model. Simple Linear Regression Model: Assumptions, Procedures and properties of OLS estimator, Co-efficient of determination, Tests of significance, Maximum Likelihood Method; Multiple Linear Regression Analysis: Method of least squares, Properties of OLS estimator, Test of significance of regression coefficient, R² and adjusted R². (12 Hours)

Unit II

Issues with Classical Regression Model: Multicollinearity, Autocorrelation and Heteroskedasticity; Functional forms; Dummy variables-Nature and uses. Stationary Time Series Models: Stochastic process, Stationary, Modeling AR, MA, ARMA processes, Deterministic and stochastic trends, unit roots, testing unit roots – Dickey & Fuller, Phillips and Perron tests. (10 Hours)

Unit III

Modeling Volatility: Conditional Heteroscedastic Models: ARCH Models, GARCH Models, Estimation of GARCH Models, Forecasting with GARCH Model, Asymmetric GARCH Models, The GARCH-in-Mean Model, Volatility and Correlation: The VECH Model, The Diagonal VECH Model, The BEKK Model, The Constant Correlation Model, the Dynamic Correlation Model. Vector Autoregressive Models: Issues in VAR, Hypothesis Testing in VAR. (10 Hours)

Unit IV

Advanced Topics in Regression Analysis Selected Topics: Dynamic Econometric Models: distributed lag models; autoregressive models; instrumental variable estimation; simultaneous equation models. Panel Data Models Methods of estimation; fixed effects model; random effects model. (10 Hours)

- 1. Dougherty, C. Introduction to Econometrics. Oxford University.
- 2. Gujrati, D. N. Basic Econometrics. Mc GrawHill Education.
- 3. Studenmund. Using Econometrics; A Practical Guide. Pearson Education.
- 4. Wooldridge, J. Introductory Econometrics A Modern Approach. Cengage Learning Pvt. Ltd.
- 5. Hatekar, N.R. Principles of Econometrics, Sage.
- 6. Kacapyr, E. A Guide to Basic Econometric Techniques, Routledge.

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9
CO1			3	3	2	3	3	3	2
CO2	3	3	3	3	3	3	3		
CO3	3	3	3	3	3	3			
CO4	3	3	3	3	3		3		

Management of Training, Learning and Development

Course Code: MS 229 L-3, Credits - 3

Objective: The course gives an overview about the need and benefits of continuous learning through training & development of employees in an organization

Course Outcomes:

CO1: Understand the key concepts of learning and training and implement it for strategic development of workforce

CO2: Learn to conduct effective needs assessment and develop an appropriate training strategy for an organization

CO3: Design the training programmes to address the needs identified and execute the training by adopting suitable method, technique and training aids.

CO4: Evaluate the training program; verify its validity and achieve overall control for improving the training function of an organization on a continuous basis.

Course Content

Unit I

The context for Training and Development: Introduction to employee training and development, key components of learning, the forces influencing working, learning and training, learning practices, Strategic training – introduction and concept, strategic training and development process, models of organizing the training department. (11 hours)

Unit II

Training and Learning: Need assessment- concept, importance and methods, competency models. Learning theories- the learning process, designing effective training programs, outcomes of evaluating a training program, evaluation process. (11 hours)

Unit III

Training and Development Methods: Traditional training methods, group building methods, choosing a training method, technology-based training methods, E-learning. Employee development and career management, approaches to employee development (11 hours)

Unit IV

Future of training and development: use of new technologies for training delivery and instruction, learning and performance support. Outsourcing training. (9 hours)

- 1. Noe, R. A & Kodwani, A.D. Employee Training & Development. McGraw Hill.
- 2. Blanchard, P.N., Thacker, J.W. Effective training systems, strategies and practices. Pearson.
- 3. Beebe, S. A., Mottet, T. P. & Roach, K. D. Training & Development: Communicating for Success. Pearson.
- 4. Bhattacharyya, D. K. Training and Development: Theory and Application. Sage.
- 5. Rao, P.L. Enriching Human Capital through Training & development. Excel Books.
- 6. Rishipal. Training and development methods. S. Chand publication.

	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9
CO 1	3	3	3	3	2	2	1	2	3
CO 2	3	3	3	3	3	3	1	3	3
CO 3	3	2	3	3	3	3	1	3	3
CO 4	3	2	3	3	3	2	1	1	3

Managing Industrial Relations

Course Code: MS 231 L - 3 Credits - 3

Objective: The objective of this course is to equip students with the knowledge of industrial relations scenario in India and labor codes for effective management of workforce in organizations.

Course Outcomes:

CO1: Examine the role of various stakeholders of industry in maintaining peace at macro and micro level in the local as well as global industry.

CO2: Understand the concepts and principles of managing industrial relations at the organization level through worker participation, grievance management, discipline management and collective bargaining.

CO3: Understand the legal processes and procedures of handling employee relations and industrial relations for better personal, professional and social life of employees.

CO 4: Application of knowledge gained about national and international industrial relations in current scenario in problem solving, strategy formation and innovative solutions to problems at organization and industry level.

Course Content

Unit I

Introduction to Industrial Relations: Concept Nature, Scope, Approaches and Evolution of Industrial Relations in India, Role of Government, Unions and Management Associations in Industrial Relations, International Labour Organization: Objectives and Major Role.

(10 Hours)

Unit II

Interactions and Outcomes in Industrial Relations: Employee Involvement and Participation: Concept, Objectives and Forms, Discipline and Grievance Management: Forms and Handling of Misconduct, Collective Bargaining: Importance, process of negotiations and recent trends in Collective Bargaining. (8 Hours)

Unit III

Legal Framework of Industrial Relations: Labor Codes: The Code on Wages, Industrial Relations Code, Social Security Code and the Occupational Safety, Health and Working Conditions Code, Prevention of Sexual Harassment at Workplace: Meaning and definition, Provisions, International Norms, National Norms, Labor Laws in IT Industry (Karnataka Shop and Establishment Act). (18 hours)

Unit IV

Emerging Scenario of Industrial Relations: Latest developments as reported by Ministry of Labor and Employment, Annual Reports of Ministry of Labor. **(6 Hours)**

- 1. Taxmann's New Labour and Industrial Laws (Latest Edition)
- 2. Saha, Satish, K. & Agarwal, Anju (Latest Edition). Industrial Relations and Labour Laws, SBPD Publications

- 3. Goparaju, Srikanth (Latest Edition). Industrial Relations in Modern India. Independent Publication
- 4. Lakhawat, Pradhyuman Singh. & Singh, Poonam. (Latest Edition). Contemporary Issues of Industrial Relations: An Indian Perspective (Management). Central West Publishing
- 5. Ministry of Labor and Employment Website www. https://labour.gov.in/
- 6. Srivastava, S.C. (Latest Edition). Industrial Relations and Labour Laws, Vikas Publications

	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9
CO 1	3	1	1	1	1	1	3	1	2
CO 2	3	1	2	3	3	1	3	3	2
CO 3	3	2	2	3	3	1	3	2	2
CO 4	3	2	2	2	3	1	3	2	2

Talent Management

Course Code: MS 233 L - 3 Credits - 3

Objective: The course focuses on the attraction, acquisition, and retention of talent in organizations.

Course Outcomes:

CO 1: Understand key concepts of talent management and create a talent management system for organization excellence

CO2: Understand key concepts of competency mapping and design an instrument for competency assessment

CO3: Analyse strategic talent acquisition practices and design & evaluate training methods to foster learning in a global workplace

CO4: Assess employee performance and analyse methods for career and succession planning in a global workplace

Course Content

Unit I

Introduction: Creating a Talent Management System for organization excellence; steps to creating a talent management system; forces impacting talent management. (10 Hours)

Unit II

Building block of Talent Management: Competency mapping- Introduction to the concept of competency, developing a competency model; Competency Assessment- principal approaches to assessing competencies; designing an instrument for competency assessment.

(12 Hours)

Unit III

Managing Talent using competency (1): competency based recruitment and selection, competency-based training and development. (10 Hours)

Unit IV

Managing Talent using competency (2): competency-based performance management; competency-based career and succession planning. (12 Hours)

- Anindya Basu Roy & Sumati Ray. Competency based Human Resource Management. Sage Text
- 2. Lance A. Berger, Dorothy R. Berger. Talent Management Handbook. Association for Talent Development (ATD) By. Virginia, USA.
- 3. Seema Sanghi. The Handbook of Competency Mapping. Sage
- 4. Sasmita Misra. Role of Competency Mapping in Talent Management. Black Eagle Books
- 5. Sudhir Warier. Competency Management. Notion Press
- 6. Louis L. Carter and Marshall Goldsmith. Best Practices in Talent Management.

	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9
CO 1	2	1	3	3	2	2	1	2	3
CO 2	2	1	3	2	2	2	1	2	3
CO 3	3	1	3	3	3	2	2	2	3
CO 4	3	1	3	3	3	2	2	2	3

Compensation and Performance Management

Course Code: MS 235 L - 3 Credits - 3

Objective: The objective of this course is to equip students with the knowledge of designing effective compensation and performance management systems in the organizations for converting the organization in a high performing work system.

Course Outcomes:

CO1: Understand the various components of pay structure, incentives, benefits to be provided to the employees to keep them motivated and performing.

CO2: Think analytically and creatively design tax efficient pay packages at every level in the organization for employees in national and international scenario.

CO3: Demonstrate an understanding of the performance management process and the ability to select an appropriate measurement approach and plan the performance management process and documentation for an organization.

CO4: Demonstrate the ability to develop creative solutions to the challenges involved in implementing the performance management process and to employ the performance management process for potential appraisal, career development and succession planning.

Course Content

Unit I

Basics of Compensation Management: Compensation Definition and Foundation, Compensation strategies in Public and private sector, Rewards, Incentives, Benefits and Supplementary compensation, Styles of Compensation, Compensation Structure- Indian Practices in Public and Private Sector (10 Hours)

Unit II

Compensation Techniques: Knowledge based compensation, Team Compensation, Competency based compensation, Role of wage boards and pay commissions in public sector compensation, Incentive schemes/ Payment-by-results (PBR), Performance linked Compensation, Tax Planning: The implication of employee compensation package on the employer, Tax efficient compensation package, International Compensation: Problems, Objectives, Elements of expatriate's compensation package, Dual compensation and tax issues in case of expatriates. (11 Hours)

Unit III

Foundations of Performance Management: Concept and Philosophy underlying Performance Management, Significance, Objectives, and Characteristics of Effective Performance Management, Models of Performance Management Process

Performance Measurement Planning and Methods: Defining Performance and Selecting a measurement approach, Developing Job Descriptions, Defining Performance standards, KRAs, and KPIs based on job descriptions, Designing appraisal forms, Methods of Performance Appraisal. (10 Hours)

Unit IV

Performance Management Implementation: Implementing Performance Management Process, Performance Monitoring, Performance Management Documentation, Performance

Review Discussions, Challenges in performance review process and measures to overcome challenges.

Other Performance and Development Issues: Coaching and Performance Management, Potential Appraisal, Performance Management in MNC, Managing Contextual Performance, Performance based career planning, career development and succession planning, Technology and Performance Management, Performance Management of the future.

(11 Hours)

Suggested Readings: (Latest Editions)

- 1. Singh, B.D. (2017) Compensation and Reward Management. Excel Books
- 2. Das, P. (2019). Compensation Management. Notion Press
- 3. Berger, L.A. (Latest Edition). The Compensation Handbook, Sixth Edition: A State-Of-The-Art Guide to Compensation Strategy and Design. McGraw Hill Europe
- 4. Martocchio, J.J. (Latest edition). Strategic Compensation: A human recourse perspective approach. Pearson
- 5. Aguinis, H. (2013). Performance Management. Pearson
- 6. Bhattacharya, D.K. (Latest Edition). Performance Management Systems and Strategies. Pearson

	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9
CO 1	3	2	3	3	3	1	2	2	2
CO 2	3	3	3	3	3	1	2	2	2
CO 3	3	2	3	3	3	1	2	2	2
CO 4	3	3	3	3	3	1	2	2	2

Digitalization and E-Governance

Course Code: MS 237 L-3, Credits -3

Objective: The course is aimed at providing exposure and making the students aware about the role of IT in business enterprises and government enterprises through electronic governance.

Course Outcomes:

CO1: Gain a familiarity with the basic concepts. terminology and technology of digitalization and e-governance.

CO2: Develop skills to critically evaluate government web sites and eservices against current "best practice" principles and standards.

CO3: Understand the major federal and state laws and regulations impacting the evolution of egovernance.

CO4: Be able to articulate the policy and social issues facing agencies to implementing e-government initiatives.

CO5: Be able to apply basic business case and government IT management concepts in preparing e-government proposals, plans or strategies.

Course Content

Unit I

Introduction to Digitalization: Digitalization for growth and Innovation. How digitalization leads to disruption and change of competition. Overview of Business Models, Impact of Digitalization on Business Models. How Digitalization is changing Business and Organizations. Understanding IT Infrastructure, Reliable and Secure IT Services. Application of IT in digital governance. (10 Hours)

Unit II

Understanding IT Infrastructure: Emerging Trends in IT Infrastructure acquisition and Service delivery, Managing a networked Organization, Organizational Issues in Managing and Controlling IT function, Digitalization and Cloud Computing: Scope and Implementation. (11 Hours)

Unit III

E-Governance: Meaning of E-governance, Understanding the Evolution of e-Governance in the Indian and Global Context, Benefits of e-governance; Developing a strategic perspective on EGovernance, Models of e-governance, E-governance action plan: National e-Governance Plan (NeGP), E-governance Infrastructure: Data Centres, State wide area networks (SWAN), National Service Delivery Gateways (NSDG), and Common Service Centres. (11 Hours)

Unit IV

Life Cycle of an e-Government Project: Critical Success Factors in implementing eGovernance. Public Private Partnership for e-Governance Project, Managing a e-Governance project, Change Management and Capacity Building for e-Governance, Information Security Management, Technology architecture for e-Governance - Enterprise Applications and Open Source for e-Governance, Regulatory framework for e-Governance (IT Act).

Suggested Readings: (Latest Editions)

- 1. Lynda M. Applegate, Robert D. Austin, Deborah L. Soule, Corporate Information Strategy and Management, Mc GrawHill Education.
- 2. Vinod Kumar T.M., E-governance for Smart Cities, Springer.
- 3. S. Pankaj, Electronic Governance, APH Publishing.
- 4. Obi.T., E-governance: A Global Perspective on a new Paradigm, IOS Press.
- 5. Nanditha Das, E-governance and Social Inclusion: Concepts and Cases, IGI Global Press.
- 6. Thomas Siebel, Digital Transformation: Survive and Thrive in an Era of Mass Extinction, Rosetta books.

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9
CO1	3	2	1	1	1		1		1
CO2	2	3	2	1	1	1	1	1	
CO3	2	1	1	2	2	2	1		1
CO4	2	2	1	1	1	1	2	1	1
CO5	1	2	2	1	1	2	1		2

Artificial Intelligence & Machine Learning

Course Code: MS 239 L-3, Credits -3

Objective: The course aims at providing the basic concepts, theories and techniques of artificial intelligence. To introduce basic concepts and applications of machine learning. To learn the application of AI/ML in the different fields of management, finance, engineering, science, medicine etc.

Course Outcomes:

CO1: Understand the basic concepts of machine learning and some typical applications

CO2: Understanding how to build and validate models and improve them iteratively

CO3: Understand the core concepts of artificial intelligence and applications

CO4: Apply knowledge representation with artificial intelligence

Course Content

Unit I

Introduction to Artificial Intelligence: Growth of Artificial Intelligence in Business, Impact of Artificial Intelligence in transforming Organizations and Identifying it's Challenges and Risks in terms of executing Artificial Intelligence Strategy. (10 Hours)

Unit II

Understanding the AI Problem: Computerized reasoning, Characteristics of an AI problem, Problem representation in AI, State space representation, problem reduction, Concept of small talk programming. (11 hours)

Unit III

Introduction to Machine Learning: Basic Concepts in Machine Learning, Types of Machine learning, Examples of Machine Learning Applications – Linear Models for Regression. (11 Hours)

Unit IV

Introduction to Neural Networks: Early Models, Perceptron Learning, Back propagation, Initialization, Training & Validation. Future Scope of Artificial Intelligence and Machine Learning. (10 Hours)

- 1. Patrick Henry Winston, Artificial Intelligence, Addison Wesley Publishing.
- 2. George F Luger, Artificial Intelligence: Structures and Strategies for Complex Problem Solving, Pearson Education/Addison Wesley Publishing.
- 3. Christopher Bishop, Pattern Recognition and Machine Learning, Springer.
- 4. Kevin P. Murphy, Machine Learning: A Probabilistic Perspective, MIT Press.
- 5. Ethem Alpaydin, Introduction to Machine Learning, MIT Press.
- 6. Oliver Theobald, Machine Learning for Absolute Beginners.

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9
CO1	2	2	1	1	1	1	1	1	2
CO2	1	2	2	2	2	1	1	2	2
CO3	2	2	2	2	2	1	1	1	1
CO4	3	3	2	1	1	1	1	1	1

Database Management Systems

Course Code: MS 241 L-2 Credits: 2

Objective: This course will help students to understand how databases can be used to store anorganization's information.

Course Outcomes:

CO1: To understand the different forms of Database, its purpose, advantages and disadvantages and compare different database models.

CO2: To implement SQL for creation, modify and display data from DBMS

CO3:Understand the basic concept of ER Models, design issues and key constraints, also Reduction of E-R Schema to Tables.

CO4: To impart knowledge about Oracle, its structure and PL/SQL commands, cursors, triggers procedure and functions.

CO5:To impart knowledge about the Structure of Relational Database, Normalization, Functional Dependencies, and their application, and learn database transaction, concurrency control and methods to manage data integrity.

Course Content

Unit I

Introduction to DBMS: Purpose, Advantages and Disadvantages of DBMS, Schemas and Instances, DBMS Architecture, Data Independence, Data abstraction, Data models – Hierarchical, Network, Relational, Object-Oriented and Object Relational. Data dictionary, metadata, RDBMS, Codd's rules. (06 Hours)

Unit II

ER-Model: Basic concepts, Types of attributes, Design Issues, Mapping Constraints, Keys, E-R Diagram: Design of an ER Database Schema, Reduction of E-R Schema to Tables, DDL and DML of SQL: Background, Basic Structure, Set Operations, Aggregate Functions, Null Values, Nested Sub Queries, Derived Relations, Views, Joined Relations, Domain Constraints, Referential Integrity, String Commands, Numeric Function, Date Function, Translate and Decode Function, Modification of Database, Data manipulation. **(08 Hours)**

Unit III

Oracle: Basic Architecture, Introduction to PL/SQL (Conditional, Logic, Loops, Exceptional Handling, Triggers, Procedures, Functions, Cursor). (08 Hours)

Unit IV

Structure of Relational Databases: Relational Algebra, Functional Dependencies, Normal forms NF1, NF2, NF3 and BCNF, Multivalued Dependencies and Fourth Normal Form, Join Dependencies and Fifth Normal Form. Transaction: ACID Properties, Transaction State, Concurrency: Locks, Deadlock Condition, Two- Phase Locking Protocol. **(06 Hours)**

- 1. Silberschatz, A, Korth H and Sudarshan S, Database System Concepts, McGraw- HillEducation.
- 2. Elmsari R. and Navathe S., Fundamentals of Database Systems, 6/e, Pearson Education.

- 3. Koch, G. & Loney, K., Oracle, The complete reference. Mc GrawHill Education.
- 4. Bipin C. Desai, Introduction to Database Management System, Galgotia Publication.
- 5. Singh, Shio Kumar, Database Systems: Concepts, Design and Applications, 2/e, PearsonEducation.
- 6. Rob. Peter, Data base system concepts, 1/e, Cengage Learning India Pvt. Ltd.

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9
CO1	1	1	2	2	3	3	1	2	2
CO2	1	2	2	2	3	3	2	2	2
CO3	1	2	2	2	3	3	2	2	2
CO4	1	1	2	2	3	3	2	2	2
CO5	1	1	2	2	3	3	2	2	2

Database Management Systems Lab

Course Code: MS 243 P-2, Credit-1

Course Contents This course will be based on MS 241 Database Management Systems Course and is part of it.

Enterprise Systems

Course Code: MS 245 L-3, Credits -3

Objective: This course aims at providing overall knowledge regarding the concepts and structure of Enterprise business systems and imparts necessary knowledge for ERP, CRM, SCM implementation in a business enterprise.

Course Outcomes:

CO1: To understand the meaning, definition, concept and type of enterprise system along with its architecture and system development.

CO2: To analyze and understand the concept of ERP and its relationship with CRM, SCM and e- commerce.

CO3: To analyze and understand the concept of SCM, e- SCM.

CO4: To interpret and understand concept of CRM. e- CRM, elements, models, applications, trends of CRM.

Course Content

Unit I

Enterprise Systems: Introduction of Enterprise Systems, Scope of Enterprise Systems, Types of Enterprise Systems; Enterprise System Architecture, Enterprise System Development, Enterprise System Implementation Strategies and Challenges, Enterprise System Integration. (10 Hours)

Unit II

ERP: Features of ERP, ERP Components, MIS Integration, ERP drivers, ERP and E-Commerce, ERP Culture, ERP and CRM, ERP and SCM, ERP Selection Issues, Pre and Post Implementation Issues, ERP Vendors, Trends in ERP, Future Scope of ERP. (10 Hours)

Unit III

SCM: An Introduction, Concepts, Issues in Supply Chain Management, Customer Focus and Distribution Management; Concept, Objective and Scope of Logistics Framework, Internet Enabled SCM, Emerging trends in Supply Chain Management. (12 Hours)

Unit IV

CRM: An Introduction, Concepts of Relationship Management, e-CRM as a Strategic Marketing Tool, Elements of e-CRM, CRM Process, Models of e-CRM, CRM Planning and Implementation, CRM Applications, Future scope of CRM. (10 Hours)

- 1. Luvai Motiwala, Enterprise Systems for Management, Pearson Education.
- 2. David Olson and Subodh Kesharwani, Enterprise Information Systems: Contemporary Trends and Issues, World Scientific Pub.
- 3. Alexis Leon, ERP Demystified, McGraw Hill Education.
- 4. Ed Peelan, Customer Relationship Management, Pearson Education.

- 5. Sunil Chopra and Peter Meindl, D V Kalra, Supply Chain Management: Strategy, Planning and Operartions, Pearson Education.
- 6. Judith M Myerson, Enterprise Systems Integration: Best Practices Series, Auerbach Publications

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9
CO1	3	2	1	1	2	1		1	2
CO2	2	1	3	2	1	1	1	2	2
CO3	2	1	1	2	2	1	1	1	1
CO4	1	1	1	2	2	2	2	1	1

International Business Environment and Strategy

Course Code: MS 247 L-3, Credits -3

Objective: The course is aimed at providing exposure and making the students aware about the role of IBE in business enterprises and government enterprises

Course Outcomes:

CO 1: The influence of international Environment on business, he can understand the various factors required for export business.

CO2: The influence of international Environment on business, he can understand the various factors required for export business.

CO3: To better understand operations in the multilateral system.

Course Content

Unit I

International Business: Definition – Internationalizing business-Advantages –factors causing globalization of business- international business environment – country attractiveness – Political, economic and cultural environment – Protection Vs liberalization of global business environment. (10 hours)

Unit II

Promotion of global business: the role of GATT/WTO – multilateral trade negotiation and agreements – VIII & IX, round discussions and agreements – Challenges for global business – global trade and investment – theories of international trade and theories of international investment – Need for global competitiveness – Regional trade block – Types – Advantages and disadvantages – RTBs across the globe – brief history. (10 hours)

Unit III

Strategic compulsions: Standardization Vs Differentiation – Strategic options – Global portfolio management- global entry strategy – different forms of international business – advantages – organizational issues of international business – organizational structures – controlling of international business – approaches to control – performance of global business performance evaluation system. (10 hours)

Unit IV

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

Disadvantages of international business – Conflict in international business- Sources and types of conflict – Conflict resolutions – Negotiation – the role of international agencies – Ethical issues in international business – Ethical decision-making. (12 hours)

Suggested Readings: (Latest Editions)

- 1. Charles W.I. Hill and Arun Kumar Jain, International Business, 6th edition, Tata Mc Graw Hill, New Delhi,
- 2. John D. Daniels and Lee H. Radebaugh, International Business, Pearson Education Asia, New Delhi
- 3. K. Aswathappa, International Business, 5th Edition, Tata Mc Graw Hill, New Delhi
- 4. Michael R. Czinkota, Ilkka A. Ronkainen and Michael H. Moffet, International Business
- 5. P Subba Rao, International Business Text and Cases, Himalaya Publishing house
- 6. Anant Sundaram, The International Business Environment, PHI New Delhi, Estern Economy Edition

	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9
CO 1	3	2	2	2	1	2	2	2	1
CO 2	2	2	2	2	1	1	2	2	2
CO 3	2	2	2	2	2	2	2	2	2
CO 3	3	2	2	2	2	2	2	2	2

Export, Import Policies, Procedures and Documentation

Course Code: MS 249 L-3, Credits -3

Objectives: To formulate organizational plans adhering to government policies and plan out procedures to fulfil the documentation process and get acquainted with the documentation and procedure to import and export business

Course Outcomes:

CO1: Understand the basics of Export and Import

CO2: Develop the skills which are required to start the export business from India.

C03: To learn the export documentation formalities in India

C04: To understand the custom and quality control formalities and schemes as per foreign trade policy

Course Content

Unit I

International Trade: Need and importance of International Trade – Recent Trends in World Trade – Leading players – India"s Foreign Trade – Commodity composition and Destination – India"s Export and Import position in World merchandise trade and services – Project Exports Deemed Exports - India"s Foreign Trade Policy – India Trade Agreements and tariff benefits. (10 Hours)

Unit II

Starting an Export Organization : Starting an export firm – Selection of an export product – Market selection –Buyer selection - Registration procedure with Sales Tax, Central Exercise and various Boards and councils – Exim code number – Elements of export contract- Global rules as UCP 600 of ICC, INCOTERMS – Terms of payment and Letter of Credit – Payment settlement of exports and Imports. (16 Hours)

Unit III

Export Documentation: Types of documents – Primary Documents – Regulatory Documents - Transport, Negotiation and Insurance documents – E- Databases and Documents Export Finance: Sources of Finance - Role of commercial bank, EXIM Bank, ECGC SIDBI and others – Export promotion Schemes – Insurance for Export – Types – export credit insurance – Risk Management – Types of risks – mitigation methods. (08 Hours)

Unit IV

Import Procedure and Documentation: Global sourcing – Types of global procurement – Tender – Negotiation – Contract and others – Customs regulations and import clearance formalities – Types of import licenses - Export Promotion Capital Goods Scheme (EPCG) license- Duty exemption scheme –Import formalities for EOUs and SEZs –CEZ - Import Risk Management. (08 Hours)

- 1. Aseem Kumar. Export and Import Management", Excel Books Publications, New Delhi
- 2. David Stewart. International Supply Chain Management", Cengage publications,

- 3. Ram Singh. Export Management" Indian Institute of Foreign Trade, New Delhi
- 4. P.K.Khurana, Export Management, Galgotia Publication, New Delhi
- 5. Jeevanandam C. Foreign Exchange: Practices Concepts and control" Sultan Chand Publications
- 6. Paul Justice & Rajiv Aserkar, Export/Import Management. Oxford Higher Education

International Financial Management

Course Code: MS 251 L-3, Credits -3

Objective: The fundamental aim of this course is to develop the skills that equip students to understand and appreciate the international financial issues that companies face when they operate in several separate countries. The course encompasses various issues relates to international capital markets, foreign exchange rate determination and global financial management.

Course Outcomes:

CO1: Understand different exchange rate regimes, and systems across the globe

CO2: Analyze, apply and evaluate information within the global financial environment of foreign exchange to solve problems and make informed decisions

CO3: Recognize and calculate forward exchange rates given spot rates, identify market conventions on exchange rate quotation

CO4: Develop a sound understanding of the foreign exchange market and foreign exchange risk exposure

CO5: Analyze both quantitative and qualitative financial information to influence foreign investment decisions

Course Content

Unit I

Global Financial Environment: Overview, International Monetary System: Exchange Rate Regimes, IMF, Euro Currency Market, EURO Market, Capital Market. Balance of Payments: Understanding, Analysis & Interpretation. (10 Hours)

Unit II

Foreign Exchange Market: Nature, Structure, Types of transactions, Exchange rate quotation & Arbitrage, Spot & Forward. Foreign Exchange Market in India: Nature, Structure, Operations & Limitations. Exchange rate Determination: Structural Models of Exchange Rate Determination, Exchange Rate Forecasting, Exchange Rate of Rupee.

(12 Hours)

Unit III

Foreign Exchange Risk Exposure: Types of Risk, The Risk Management Process: Hedging, Swaps, Futures, Options, Role of Regulatory Bodies. (10 Hours)

Unit IV

Foreign Investment Decisions: International Project Appraisal, Exchange Rate Risk & Cost of Capital, International Joint Ventures, A review of NPV Approach. (10 Hours)

- 1. Eun, Cheol; and Resnick, Bruce, G. International Financial Management. McGraw Hill Education Private Limited.
- 2. Apte, P. International Financial Management. McGraw Hill Education Private Limited.
- 3. Levi, Maurice D, International Finance. Routledge.
- 4. Shapiro, Alan C, Multinational Financial Management. Wiley Publishers.
- 5. Sharan, V, International Financial Management. Prentice Hall India.
- 6. Siddaiah, T, International Financial Management: An Analytical Framework. Pearson.

Co-Po Mapping

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9
CO1	3	1		1	2	1			1
CO2	3	2	1	3	2				1
CO3	2	3	1	2	2	1	1		
CO4	3	3	2	1	1		1		2
CO5	3	3	3	3	3	1	1	2	3

International Business Negotiation

Course Code: MS 253 L - 3 Credits-3

Objective: The course guides through the negotiation process, on getting started, the sequence of actions, expectations while negotiating.

Course Outcomes:

CO1: Understand global business negotiation and its environmental setting

CO 2: Understand role of culture in global business negotiation and avoid any confusion and misinterpretation

CO3: Analyse his/ her style of negotiation as well as learn how to adjust this style according to the counterpart's style

CO4: Explore different tools for a successful negotiation deal, including communication styles and technology-based tools; and learn the applicability of each tool.

Course Content

Unit I

Introduction: Overview of Global Business Negotiations, Negotiation architecture, instability & change. Negotiation Environment Setting: Negotiation infrastructure; Assessing current status; assessing BATNA. (11 hours)

Unit II

Role of Culture in Cross-Border Negotiations: Effect of culture on negotiation- weak/ strong points of American, Japanese and Chinese negotiators. Role of corporate culture in negotiations- Gender. Understanding different negotiating styles: Selecting Your Negotiating Style.

(11 hours)

Unit III

Process of Negotiation: Pre-negotiations Planning- building momentum, priority and outcome mapping. Initiating Global Business Negotiations; Making the First Move; Closing Business Negotiations. When agreements don't survive- outside support, mediation. (10 hours)

Unit IV

Tools for Negotiation: Communication Skills for Effective Negotiations- practical verbal signs, deadlock& breaking deadlock, language choice, visual communication. Demystifying the Secrets of Power Negotiations; Internet and Contemporary Negotiations.

(10 hours)

- 1 Subhash Jain & Claude Cellich. Global Business Negotiations: A Practical Guide. South-Western Educational Publishing
- 2. Pervez.N.Ghauri & JeanClaude Usunier. International Business Negotiations. ,Pergamon

- 3. Claude Cellich & Subhash C. Jain. Creative solutions to Global Business Negotiations. Business Expert Press
- 4. Rudd & Lawson. Communicating in global Business Negotiations: A geocentric approach. Sage
- 5. Barry Maude. International Business Negotiation: principles and practice.
- 6. Baber & Fletcher-Chen. Practical Business Negotiation. Routledge

	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9
CO 1	3	2	3	2	2	1	2	2	3
CO 2	3	2	2	2	2	1	2	3	3
CO 3	3	3	3	3	3	1	3	2	3
CO 4	3	2	3	3	3	3	2	3	3

Enterprise Systems

Course Code: MS 255 L-3, Credits -3

Objective: This course aims at providing overall knowledge regarding the concepts and structure of Enterprise business systems and imparts necessary knowledge for ERP, CRM, SCM implementation in a business enterprise.

Course Outcomes

CO1: To understand the meaning, definition, concept and type of enterprise system along with its architecture and system development.

CO2: To analyze and understand the concept of ERP and its relationship with CRM, SCM and e- commerce.

CO3: To analyze and understand the concept of SCM, e- SCM.

CO4: To interpret and understand concept of CRM. e- CRM, elements, models, applications, trends of CRM.

Course Content

Unit I

Enterprise Systems: Introduction of Enterprise Systems, Scope of Enterprise Systems, Types of Enterprise Systems; Enterprise System Architecture, Enterprise System Development, Enterprise System Implementation Strategies and Challenges, Enterprise System Integration. (10 Hours)

Unit II

ERP: Features of ERP, ERP Components, MIS Integration, ERP drivers, ERP and E-Commerce, ERP Culture, ERP and CRM, ERP and SCM, ERP Selection Issues, Pre and Post Implementation Issues, ERP Vendors, Trends in ERP, Future Scope of ERP. (10 Hours)

Unit III

SCM: An Introduction, Concepts, Issues in Supply Chain Management, Customer Focus and Distribution Management; Concept, Objective and Scope of Logistics Framework, Internet Enabled SCM, Emerging trends in Supply Chain Management (12 Hours)

Unit IV

CRM: An Introduction, Concepts of Relationship Management, e-CRM as a Strategic Marketing Tool, Elements of e-CRM, CRM Process, Models of e-CRM, CRM Planning and Implementation, CRM Applications, Future scope of CRM. (10 Hours)

- 1. Luvai Motiwala, Enterprise Systems for Management, Pearson Education.
- 2. David Olson and Subodh Kesharwani, Enterprise Information Systems: Contemporary Trends and Issues, World Scientific Pub.
- 3. Alexis Leon, ERP Demystified, McGraw Hill Education.
- 4. Ed Peelan, Customer Relationship Management, Pearson Education.
- 5. Sunil Chopra and Peter Meindl, D V Kalra, Supply Chain Management: Strategy, Planning and Operartions, Pearson Education.

6. Judith M Myerson, Enterprise Systems Integration: Best Practices Series, Auerbach Publications

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9
CO1	3	2	1	1	2	1		1	2
CO2	2	1	3	2	1	1	1	2	2
CO3	2	1	1	2	2	1	1	1	1
CO4	1	1	1	2	2	2	2	1	1

Operations Strategy

Course Code: MS 257 L - 3 Credits - 3

Objective: The objective of this course is to familiarize the students with tools, techniques and models of operations strategy formulation and equip them with the knowledge and capacity to make decisions in the areas of operations and strategy

Course Outcomes:

CO1: Demonstrate the understanding of the strategic significance of operations and appreciate various decision areas

CO2: Analyze various performance objectives and their relative significance in gaining competitive advantage

CO3: Appreciate the factors influencing capacity decisions and evaluate supply chain networks.

CO4: Develop an understanding of various approaches, frameworks and models of strategy formulation and demonstrate the ability to apply them.

Course Content

Unit I

Operations Strategy: Definition of Operations Strategy; Significance of Operations Strategy; Four Perspectives on Operations Strategy; An Over View of Content of Operations Strategy: Performance Objectives and Decision Areas; Operations Strategy Matrix

(8 Hours)

Unit II

Operations Performance: Five Generic Performance Objectives- Quality, Speed, Dependability, Flexibility, Cost; Order-Winning and Qualifying Competitive Factors; Relative Importance of Performance Objectives; Influence of Product/Service Life Cycle and Changes in Resource Base on Operations Strategy. (10 Hours)

Unit III

Capacity Strategy: Three Levels of Capacity Decision; Factors Influencing Capacity Decisions, Capacity Change and Timing of Capacity Change; Supply Network Strategy: Supply-Network Perspective, Value Net, Inter-Operations Relationships in Supply Networks, Decision Logic of Outsourcing, Advantages and Disadvantages of Outsourcing; Partnership Supply and Elements of Partnership Supply Relationships . (12 Hours)

Unit IV

Process of Operations Strategy: Sustainable Alignment and Operations Strategy 'Fit', Static and Dynamic Approaches to Sustainability, Basic Aspects of Operations Strategy Formulation, Operations Strategy Formulation Models: The Hill Framework and The Platts-Gregory Procedure, Barriers to Strategy Formulation, New Approaches to Operations Management, Socially Responsible Operations Strategy. (12 Hours)

Suggested Readings: (Latest Editions)

1. Slack, N., & Lewis, M. Operations Strategy.

- 2. Hayes, Robert H., Gary P. Pisano, David M. Upton, and Steven C. Wheelwright. Operations, Strategy, and Technology: Pursuing the Competitive Edge. Wiley, ISBN: 9780471655794.
- 3. Hill, Terry. Manufacturing Strategy: Texts and Cases. Palgrave Macmillian. ISBN: 9780333762226.
- 4. Van Mieghem, Jan A. Operations Strategy: Principles and Practice. Dynamic Ideas. ISBN: 9780975914663.
- 5. Walters, D. Operations Strategy. Palgrave Macmillan.
- 6. Chandrasekaran, N. & Chandiran, P. Operations Strategy, Cengage Learning India.

Logistics and supply chain management

Course Code: MS 259 L - 3 Credits - 3

Objective: The objective of the course is to enable students develop conceptual and analytical understanding of the constituents of supply chain and logistics and use information technology for efficient integration and performance.

Course Outcomes:

CO1: Demonstrate conceptual understanding of supply chain and logistics and factors influencing supply chain and logistics operations

CO2: Ability to use various tools and techniques for taking decisions related to supply chain and logistics.

CO3: Develop an integrated view and understanding of various components of purchase and material management and the processes involved in efficient materials management

CO4: Apply the knowledge of information technology for designing and implementing logistics systems.

Course Content

Unit I

Perspective of Supply Chain Logistics Management: Logistics concept, role and scope; Logistics Environment- Integrating Logistics of Supply, Logistics of Production and Logistics of Distribution. Internal and external factors for logistics strategy. **(8 Hours)**

Unit II

Operational Resources of logistics: Personnel, Warehouse, Means of Transport, Warehouse Transport Aids, Organizational aids, Material stocks and Storage, Spare; Effective supply chain management, Customer Networking and manufacturing, Risk Pooling, Postponement, Cross Docking in Supply Chain, CPFR, IT-enabled supply chains, Value of Information, Coordination in SCM. (12 Hours)

Unit III

Logistics Activity Mix: JIT and Logistics, Synchronized manufacturing, Purchasing and Materials Management, Distributional logistical systems and facilities-single stage or multistage, warehouse(s), their number, location and allocation, Automated Warehousing, Materials Handling and Packaging. (10 Hours)

Unit IV

Supply Chain Logistics Mix Management: Logistical Connectivity: Transportation modes, rate structure, legal aspects; maintenance, spares and repairs, test and support equipment, Routing of freight flows. Management and Organization of the Logistics Systems; Organization, Information and Cost Control; Logistical Information Systems, Computer Aided Logistics Management. (12 Hours)

- 1. Grant, D. B et. al. Sustainable Logistics and Supply Chain Management: Principles and Practices of Sustainable Operations and Management. Kogan Page Ltd
- 2. Rushton, A et. Al. The handbook of logistics and distribution management: understanding the supply chain. Kogan Page Limited
- 3. Christopher, M Logistics & supply chain management Pearson Education, New York.
- 4. David, E. M and Sydow, J. A Supply Chain Logistics Program for Warehouse Management. CRC Press, Taylor & Francis Group, LLC
- 5. Pagano, A.M., & Liotine, M. Technology in Supply Chain Management and Logistics. Elsevier
- 6. Mangen, J et al. Global Logistics and Supply Chain Management. Wiley

Predictive Analysis and Big Data

Course Code: MS 261 L - 3 Credits - 3

Objective: The objective of this course is to introduce students to the capabilities and applications of predictive analysis and big data analytics.

Course Outcomes

CO1: Develop an understanding of preparing data for applying predictive analysis

CO2: Learn predictive data analysis and big data analysis techniques

CO3: Understand how to treat data for errors so as to analyse management problems correctly and create effective solutions

CO4: Be able to apply predictive analysis tools to solve organizational problems using a systematic and analytical decision-making approach

Course Content

Unit I

Data Processing for Predictive Analysis: Data Transformation, Min-Max Normalization, Z-Score Standardization, Transformations to Achieve Normality, Graphical and Numerical Methods for identifying outliers. **(6 Hours)**

Unit II

Predictive Analytics: Multiple Regression and Model Building, Logistic Regression, Neural Networks, Naïve Bayes and Bayesian Networks, Model Evaluation Techniques. (**16 Hours**)

Unit III

Introduction to Big Data & Analytics: What is Big Data? Characteristics and Evolution of Big Data, Traditional Business Intelligence (BI) Versus Big Data, Terminologies used in Big Data Environments, Analytics Flow for Big Data, Big Data Stack. **(6 hours)**

Unit IV

Big Data Analytics: Working with big data analytics tools: NoSQL, Hadoop, MapReduce, MongoDB and Cassandra, Hands-on practical learning on these tools. (14 Hours)

- 1. Evans, J.R. (Latest Edition). Business Analytics. Pearson
- 2. Larose, D.T. & Wali, O.P. (Latest Edition). Data Mining and Predictive Analytics (An Indian Adaptation), Wiley
- 3. Prince, J.T. & Bose, A. (Latest Edition). Predictive Analytics for Business Strategy Reasoning from Data to Actionable Knowledge, McGraw Hill
- 4. Acharya, S. & Chellappan (Latest Edition). Big Data and Analytics, Wiley, India.
- 5. Bahga, A. & Madisetti, V. (Latest Edition). Big Data Science and Analytics: A Hands-On Approach
- **6.** Marr, B. (Latest Edition). Big Data in Practice: How 45 Successful Companies used Big Data Analytics to Deliver Extraordinary Results, Wiley

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9
CO1	3	2	1	2	3	3	2	3	3
CO2	3	3	1	2	3	3	2	3	3
CO3	3	3	1	1	3	3	2	3	3
CO4	3	3	1	2	3	3	2	3	3

MOOC/Open Elective

Course Code: MS 263 Credits - 3

To remove rigid boundaries and facilitate new possibilities for learners in education system, study webs of active learning for young aspiring minds is India's Nation Massive Open Online Course (MOOC) platform. Massive Open Online Courses (MOOCs) are <u>online courses</u> which are designed to achieve the three cardinal principles of India's education policy: Access, Equity and Quality. MOOCs provide an affordable and flexible way to learn new skills, career development, changing careers, supplemental learning, lifelong learning, corporate eLearning & and deliver quality educational experiences at scale and more.

A student is required to earn 3 credits by completing quality –assured MOOC programme offered on the SWAYAM portal or any other online educational platform approved by the UGC / regulatory body from time to time at PG level. Successful Completion Certificate should be submitted to respective institute for earning the course credit.

Alternatively, student can pursue any course offered in the campus by any USS/College at PG level with due intimation to the Program Coordinator/Dean /Director of the School/College.

Business Analytics Lab

Course Code: MS 265 P-2, Credits - 1

Objective: The course is aimed at enabling the students with hands-on exposure to the analytical tools and software to support the management in decision making.

Course Outcomes:

CO1: Apply data visualization and validation techniques for effective data presentation and management

CO2: Apply data analysis tools to solve management problems with data perspectives

CO3: Apply predictive analysis tools to solve organizational problems using a systematic and analytical decision-making approach

Course Content

Unit I

Practical exposure to Discrete and Continuous Metrics, Nominal, Ordinal, Interval and Ratio Data, Exercises on understanding different types of decision models. (4 Hours)

Unit II

Hands-on exercises on using Look-up functions, data validation and whatif analysis in spreadsheets, building google dashboard and Power BI dashboard. (12 Hours)

Unit III

Practical exposure to identification of outliers through Normal Distribution and Box Plots, Hands-on practice on Mahalanobis' Distance and Cook's D, spreadsheet modeling for business decisions (at least four exercises). (6 hours)

Unit IV

Building good regression models: Performing regression analysis, checking the regression model, testing regression assumptions, choosing best regression models.

Performing Principal component analysis and cluster analysis, reading results and interpreting results for problem solving and decision making. (6 Hours)

Co-Po Mapping

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9
CO1	3	3	2	2	3	3	1		2
CO2	2	3	3	3	3	3	1	1	2
CO3	2	3	2	3	3	3	1		3