



Management

Ph.D. Course Work (Applicable for the scholars admitted from the AY: 2025-26)

The credit requirement for the Ph.D. coursework is a minimum of 12 credits, including the courses on ‘Research Methodology’ and ‘Research and Publication Ethics’ for 2 credits each. The candidate must complete two domain-specific courses of 3 credits each, recommended by the respective Department Research Committee (DRC). These courses can be completed through MOOCs.

The candidate must present two research seminars before the completion of coursework, typically within the first year. The first research seminar shall be before the end of the first semester on the introduction to the proposed research work, and the second seminar shall be before the end of the second semester or after the completion of coursework on the research proposal, as per the format provided. Each research seminar will have one credit weightage. The course structure is presented in Table 1, and a list of domain-specific courses is presented in Table 2.

Table 1: Course Structure

S.No.	Course Code	Name of the Course	Credit (s)
1	2517UC01	Research Seminar –I	1
2	2517UC02	Research Seminar –II	1
3	2517UC03	Research Methodology	2
4	2517UC04	Research and Publication Ethics	2
5		Domain Specific Course –I	3
6		Domain Specific Course –II	3
Total			12

Table 2: List of Domain-Specific Courses

S. No.	Course Code	Name of the Course
1	2517MN01	Managerial Economics
2	2517MN02	Global Markets and International Strategy
3	2517MN03	Strategic Management
4	2517MN04	Entrepreneurship
5	2517MN05	Project Management for Managers
6	2517MN06	Marketing Management
7	2517MN07	Retail Marketing
8	2517MN08	Services Marketing
9	2517MN09	Marketing Research and Analysis
10	2517MN10	Customer Relationship Management
11	2517MN11	Product and Brand Management
12	2517MN12	Retail Marketing Strategy
13	2517MN13	Sustainable Marketing and Consumer Behaviour
14	2517MN14	Corporate Finance
15	2517MN15	Financial Services and Markets
16	2517MN16	Security Analysis & Portfolio Management
17	2517MN17	Commodity Derivatives & Risk Management
18	2517MN18	Financial Technology
19	2517MN19	Introduction to Indian Banking System
20	2517MN20	Human Resource Management
21	2517MN21	Organizational Behaviour
22	2517MN22	Organization Change and Development
23	2517MN23	Compensation and Reward Management
24	2517MN24	Performance and Reward Management
25	2517MN25	HR Analytics and Strategic HRM
26	2517MN26	Supply Chain Management
27	2517MN27	Operations and Supply Chain Management
28	2517MN28	Production and Operations Management
29	2517MN29	Service Management: Integrating Strategy, Operations, and Technology
30	2517MN30	Data Mining for Business Decisions
31	2517MN31	Business Analytics

RESEARCH METHODOLOGY

Course Code: 2517UC03

UNIT -I:

Research Design

Overview of research process and design, Use of Secondary and exploratory data to answer the research question, Qualitative research, Observation studies, Experiments, and Surveys. Case studies.

UNIT-II:

Data Collection and Sources

Measurements, Measurement Scales, Questionnaires and Instruments, Sampling and methods. Data - Preparing, Exploring, examining and displaying.

UNIT-III:

Data Analysis and Reporting

Overview of Multivariate analysis, Hypotheses testing and Measures of Association. Presenting Insights and findings using written reports and oral presentation.

UNIT-IV:

Intellectual Property Rights

Intellectual Property—The concept of IPR, Evolution and development of concept of IPR, IPR development process, Trade secrets, utility Models, IPR & Bio diversity, Role of WIPO and WTO in IPR establishments, Right of Property, Common rules of IPR practices, Types and Features of IPR Agreement, Trademark, Functions of UNESCO in IPR maintenance.

UNIT-V: Patents

Patents—objectives and benefits of patent, Concept, features of patent, Inventive step, Specification, Types of patent application, process of e-filing, Examination of patent, Grant of patent, Revocation, Equitable Assignments, Licenses, Licensing of related patents, patent agents, Registration of patent agents.

Textbooks:

1. Research Methodology: A Step-by-Step Guide for Beginners, Ranjit Kumar, Sage Publications, 4th Edition, 2015.
2. Intellectual Property: A Very Short Introduction, Siva Vaidhyanathan, Oxford University Press, 2017.
3. Intellectual Property: The Law of Trademarks, Copyrights, Patents, and Trade Secrets" Deborah E. Bouchoux, Cengage India, 4th Edition, 2013.

Reference Books:

1. Research methodology: an introduction for science & engineering students, Stuart Melville and Wayne Goddard, Juta Academic, 2nd Edition, 2014.
2. Research design: Qualitative, quantitative, and mixed methods approach, Creswell, J.W. and Creswell, J.D., Sage Publications, 2017.

3. Intellectual Property in New Technological Age, Robert P. Merges, Peter S. Menell, Mark A. Lemley, Clause 8 Publishing; Volume I: Perspectives, Trade Secrets & Patents; 2023.

Web Links:

1. <https://archive.nptel.ac.in/courses/121/106/121106007/#>
2. https://onlinecourses.swayam2.ac.in/ntr24_ed08/preview

RESEARCH AND PUBLICATION ETHICS

Course Code: 2517UC03

UNIT-I: Philosophy & Ethics:

Introduction to Philosophy: Definition, Nature & Scope, Concept, Branches

Ethics: Definition, Moral Philosophy, Nature of Moral Judgements & Reactions

UNIT-II:

Scientific Conduct

Ethics with respect to Science and Research, Intellectual Honesty & Research Integrity

Scientific Misconduct: Falsification, Fabrication & Plagiarism

Redundant Publications: Duplicate & Overlapping Publication, Salami Slicing, Selective Reporting & Misrepresentation of Data

UNIT-III: Publication Ethics

Publication Ethics: Definition, Introduction and Importance

Best Practices/Standard Setting Initiatives and Guidelines: COPE, WAVE, etc., Conflicts of Interest

Publication Misconduct: Definition, Concept, Problems that lead to unethical behavior and vice-versa, types, Violation of Publication Ethics, Authorship and Contributor-ship, Identification of Publication Misconduct, Complaints and Appeals, Predatory Publishers and Journals

UNIT-IV: Open Access Publishing

Open Access publications and Initiatives, SHERPA/RoMEO online resource to check publisher copyright and self-achieving policies, Software tool to identify predatory publications developed by SPPU, Journal Finder/Journal Suggestion tools viz. JANE, ELSEVIER, SPRINGER, Journal Suggester, etc.

UNIT-V: Publication Misconduct Group Discussions:

Subject-specific Ethical issues, FFP, Authorship, Conflicts of Interest, Complaints and Appeals: Examples and fraud from India and Abroad

Software tools:

Use of Plagiarism software like Turnitin, Urkund and other open-source software tools

Database and Research Metrics:

Database:

Indexing database, Citation database: web of science, Scopus etc.

Impact factor of journal as per the Journal Citation Report, SNIP, SJR, IPP, and Cite Score

Metrics: h-index, g-index, i-10 index, AL metrics, etc.

Textbooks:

1. Philosophy in Science, Bird A, Routledge, 2006.
2. A Short History of Ethics, MacIntyre, London, 1967.

Reference Book:

1. Ethics in Science, Education and Governance, Indian National Science Academy, 2019.

Weblinks:

1. www.niehs.nih.gov/research/resources/bioethics/whatis
2. https://onlinecourses.swayam2.ac.in/nou22_ge73/preview

MANAGERIAL ECONOMICS

Course Code: 2517MN01

UNIT-I:

Introduction to Managerial Economics: Definition, Nature and Scope, Relationship with Other Areas in Economics, and The Role of the Managerial Economist. Concept of opportunity cost, Incremental concept, time Perspective, Discounting Principle, Risk & uncertainty, Equi marginal Principle, Concept of Utility.

UNIT-II:

Demand Analysis: Introduction to Demand, Law of Demand, Determinants of Demand, Demand Function, Elasticity of Demand, Types and Significance of Elasticity of Demand—Measurement of price Elasticity of Demand – Need for Demand forecasting, forecasting techniques, Law of Supply, Elasticity of Supply.

UNIT-III:

Production Analysis: Production function, Types of Production, Factors of Production, Law of Variable Proportion, Isoquant and Isocost, Marginal Rate of Technical Substitution, Production functions with one/two variables, Cobb-Douglas Production Function, Returns to Scale and Laws of Returns.

UNIT-IV:

Cost Theory and Estimation: Cost concepts, determinants of cost, cost–output relationship in the short run and long run—Economies and Diseconomies of Scale, Breakeven Point, Cost–Volume–Profit analysis.

UNIT-V:

Market Structure and Pricing Practices: Features and types of different Markets – Price- Output determination in Perfect competition, Monopoly, Monopolistic competition and Oligopoly both in the long run and short run. Pricing methods in practice.

Market Failures: definition, types, causes, effects, and corrective measures for market failures.

Macroeconomics: National income–definition, concepts, measurement of national income, Trade cycles, Monetary policy, Fiscal policy, inflation and balance of payment.

Textbooks:

1. Managerial Economics: Principles and Worldwide Applications, Dominick Salvatore & Siddhartha K. Rastogi, Oxford University Press, 9th Edition, 2020.
2. Managerial Economics, William F. Samuelson, Stephen G. Marks, & Jay L. Zagorsky, John Wiley & Sons, 9th Edition, 2021.

Reference Books:

1. Managerial Economics: Problem-Solving in a Digital World, Nick Wilkinson, Cambridge University Press, 2nd Edition, 2022.
2. Managerial Economics, Satya P. Das, SAGE Publications India, 2nd Edition, 2022.

Web Links:

1. <https://archive.nptel.ac.in/courses/110/101/110101149/>
2. <https://archive.nptel.ac.in/courses/110/105/110105075/>

GLOBAL MARKETS & INTERNATIONAL STRATEGY

Course Code: 2517MN02

UNIT-I:

Introduction to Globalization and Trade Theories: Globalization trends and effects, Absolute, Comparative, Competitive Advantage, Porter's Diamond Model, Global trade organizations (WTO, IMF, World Bank), FDI vs. FPI.

UNIT-II:

Entry Modes & Market Selection: Exporting, Franchising, Joint Ventures, Wholly Owned Subsidiaries, Market Selection Criteria (PESTLE), Country Risk Analysis, Regional Integration (EU, ASEAN, NAFTA), Case Examples: IKEA, McDonald's, Tata Motors.

UNIT-III:

International Strategy Formulation: Standardization vs. Localization, Global strategy vs. multi-domestic strategy, Value chain configuration and coordination, Strategic alliances and mergers, Cross-border innovation.

UNIT-IV:

Global Supply Chain & Logistics: International logistics challenges, Incoterms and international shipping, Supply chain digitization, Risk management in global operations, Sustainable logistics practices.

UNIT-V:

Global Business Environment and Trends: Geopolitical shifts and trade wars, Currency risks and hedging, Role of technology and e-commerce, Global talent mobility, Final simulation: Expand an Indian brand globally.

Textbooks:

1. Global strategy, Peng, M. W., Cengage Learning, 5th ed., 2022.
2. Redefining global strategy: Crossing borders in a world where differences still matter, Ghemawat, P., Harvard Business Review Press, Updated ed., 2021.

Reference Books:

1. Global corporate strategy and trade policy, Rugman, A. M., & Verbeke, A., Routledge, 2nd ed., 2021.
2. Strategic transformation and global strategy, Yip, G. S., & Johnson, G., Palgrave Macmillan, 2nd ed., 2021.

Web Links:

1. <https://unctad.org/topic/investment/world-investment-report>
2. https://www.wto.org/english/thewto_e/whatis_e/whatis_e.htm

STRATEGIC MANAGEMENT

Course Code: 2517MN03

UNIT-I:

Introduction to Strategic Management: Strategic Context and Terminology, Definition of Strategy, Difference between Policy, Strategy, and Tactic, Strategic Planning—Difference between Long-Range Planning and Strategic Planning, Characteristics of Strategic Decisions.

UNIT-II:

Strategy Formulation: Mission, Vision & Strategic Intent, features of strategic goals. Social Responsibility and ethical decision-making, analyzing the business environment: External environment, Porter's Industry Analysis, Five Forces Model. Internal Analysis of the firm, value chain analysis. Strategic Analysis: SWOT, BCG Matrix, Ansoff Matrix, PIMS, Market Development, Product Development, Concentration, Horizontal Integration, Vertical Integration, Diversification, Liquidation, Sell-off, Cost Leadership, Differentiation, Focus, Industry Strategies—Fragmented, Emerging, Maturing, Declining.

UNIT-III:

Strategy Implementation: Strategy and structure, managing strategic change, establishing strategic controls, Management tools in strategy: Benchmarking, Benchmarking practices worldwide, Reengineering: systematic approach, clean sheet approach, Reverse Engineering, Balanced Score card, Crisis Management, Strategic Agility.

UNIT-IV:

Corporate Restructuring: Forms of corporate restructuring, Rational for existence of firms, Organizational forms, Turnaround management, Joint Ventures & Strategic Alliances: Generic motives for a strategic alliance, types of strategic alliances, managing the alliances, Mergers & Acquisitions: Rationale for mergers & acquisitions, Mergers types, Divestitures & Spin-offs: Liquidations and spin-offs.

UNIT-V:

Strategic Evaluation and Control: Strategic Evaluation and Control: Concept, Role, and Barriers, Control Process, Techniques of Strategic Evaluation and Control.

Textbooks:

1. Business Policy and Strategic Management, Lawrence R. Jauch, William F. Glueck, Frank Brothers, McGraw-Hill, 5th Edition, 1988.
2. Strategic Management, John A. Pearce II, Richard B. Robinson, Jr., McGraw-Hill Education, 14th Edition, 2014.

Reference Books:

1. Concepts in Strategic Management and Business Policy, Thomas L. Wheelen, J. David Hunger, & Krish Rangarajan, Pearson Education, 9th Edition, 2006.
2. Cases in Strategic Management, S.B. Budhiraja, & M.B. Athreya, Tata McGraw Hill Publishing Company Limited, 1st Edition, 2016

Web Links:

1. <https://archive.nptel.ac.in/courses/110/108/110108047/>
2. <https://archive.nptel.ac.in/courses/110/105/110105161/>

ENTREPRENEURSHIP

Course Code: 2517MN04

UNIT-I:

Introduction to Entrepreneurship: Importance, Characteristics, and Qualities of Entrepreneurship, The Entrepreneurial Mindset; Role of Entrepreneurship in Economic Development, Ethics and Social Responsibilities of an Entrepreneur.

UNIT-II:

Institutional Support for Entrepreneurship: Role of Government and Support Agencies: Role of IDBI, NIESBUD, SISI, DIC; Financial Institutions, Commercial Banks, Entrepreneurial Development Institutes, Universities and other Educational Institutions offering Entrepreneurial Development Programmes.

UNIT-III:

Entrepreneurial Training and Development: Designing Appropriate Training Programmes to Inculcate Entrepreneurial Spirit, Training for New and Existing Entrepreneurs, Feedback and Performance of Trainees, Phases of Entrepreneurial Development Programmes (EDPs).

UNIT-IV:

Women Entrepreneurship: Role & Importance of Women Entrepreneurs, Profile of Women Entrepreneurs in India, Problems and Challenges faced by Women Entrepreneurs, Strategies for Women Entrepreneurship Development in India.

UNIT-V:

Creativity, Innovation, and New Venture Management: Creativity and Entrepreneurship: Sources and Methods of Idea Generation, Planning and Development of Programmes, E-Business Ventures, Business Plan Formulation, New Venture Management.

Text Books:

1. Entrepreneurship, Robert Hisrich, Michael Peters & Dean Shepherd, McGraw-Hill Higher Education, 11th Edition, 2020.
2. Entrepreneurship, Michael P. Peters, Dean A. Shepherd, Sabyasachi Sinha & Robert D. Hisrich, McGraw-Hill India, 11th Edition (Indian version), 2025.

Reference Books:

1. The Lean Startup: How Today's Entrepreneurs Use Continuous Innovation to Create Radically Successful Businesses, Eric Ries, Crown Business, 1st Edition, 2011.
2. The Hard Thing About Hard Things: Building a Business When There Are No Easy Answers, Ben Horowitz, Harper Business, 1st Edition, 2014.

Web Links:

1. <https://www.investopedia.com/articles/investing/052715/4-common-ecommerce-business-models.asp>
2. <https://www.sba.gov/learning-center>

PROJECT MANAGEMENT FOR MANAGERS

Course Code: 2517MN05

UNIT-I:

Strategic Initiation and Project Fundamentals: Defining the project: Understanding project characteristics and their differentiation from routine operations, Project selection methods and financial concepts for aligning projects with organizational strategy, Organizational structure: Analysing project integration within company structures and the role of a Project Management Office (PMO). Project charter and stakeholders: Creating a project charter, defining objectives, and identifying all key stakeholders.

UNIT-II:

Comprehensive Project Planning: Scope and work breakdown: Using a Work Breakdown Structure (WBS) to decompose project goals into a clear and manageable scope, Schedule and resources: Developing project schedules with tools like Gantt charts and the Critical Path Method (CPM); allocating resources effectively. Budgeting and cost control: Developing cost estimates and budgets, proactively controlling and forecasting expenditures. Risk management: Identifying, analyzing, and planning responses for potential risks; creating a risk register.

UNIT-III:

Managerial Execution and Quality Control: Team leadership: Understanding leadership styles, building effective project teams, and managing interpersonal conflicts. Performance monitoring: Using metrics and tools like Earned Value Management (EVM) to track progress against project baselines. Managing change: Implementing integrated change control processes. Quality assurance: Applying principles to ensure all deliverables meet defined quality standards.

UNIT-IV:

Agile and Alternative Methodologies: Agile principles: Understanding the core values of Agile, focusing on iteration, feedback, and flexibility. Scrum framework: Learning the components of the Scrum methodology, including sprint planning, execution, and retrospectives. Hybrid approaches: Exploring methodologies that integrate both predictive (waterfall) and Agile approaches. Emerging technologies: Discussing the use of AI tools for risk discovery, meeting summarization, and stakeholder communication.

UNIT-V:

Project Closure and Professional Skills: Project closure activities: Formally closing a project, including client handover and final documentation. - Audits and lessons learned: Evaluating project performance and conducting lessons-learned reviews to inform future projects. Communication and reporting: Mastering effective communication and reporting tactics for engaging stakeholders. Organizational integration: Assessing a project's long-term impact and ensuring its benefits are realized across the organization.

Text Books:

1. Project Management: A Managerial Approach, Jack R. Meredith & Samuel J. Mantel Jr., Wiley, 9th Edition, 2017.
2. Project Management: The Managerial Process, Erik W. Larson & Clifford F. Gray, McGraw Hill, 8th Edition, 2020.

Reference Books:

1. Fundamentals of Project Management, Joseph Heagney, AMACOM, 5th Edition, 2017.
2. Project Management for Managers, Prasanna Chandra, McGraw Hill, 2nd Edition, 2015.

Web links:

1. <https://nptel.ac.in/courses/110107081>
2. <https://www.projectmanagement.com/>

MARKETING MANAGEMENT

Course Code: 2517MN06

UNIT-I:

Introduction to marketing, Core concepts of Marketing; Marketing Vs Selling; Marketing Orientations; Marketing Environment; Buyer Behaviour; Marketing Planning Process; Consumer value and satisfaction; Identification and Analysis of Competitors.

UNIT-II:

Market Segmentation and pricing, Targeting and Positioning strategies; Marketing Mix; The product, New Product Development, Product Life Cycle, Product Mix decisions, Branding, Packaging and Labelling. Factors influencing Price – five “C”s, Pricing Strategies; New product pricing.

UNIT-III:

Marketing Research: Need for market research, types of marketing research, stages of marketing research, Marketing environment, customer value proposition, Non-segmented markets, purpose of segmentation and market entry, target market selection, stages of target marketing analysis business markets, analysing consumer markets.

UNIT-IV:

Distribution Decisions: Channel alternatives; Choice of Channel; Channel Management, Channel Dynamics, Managing promotion Mix; Advertising, Personal selling, Sales Promotion and publicity, Integrated Marketing Communication.

UNIT-V:

Marketing Control techniques; Marketing Audit; Social Marketing; Green Marketing; Web Marketing, New product options and development. Learning Support.

Text Books:

1. Principle of Marketing - South Asian Perspective, Philip Kotler & Gary Armstrong, Prafulla Y Agnihotri, Pearson, 13/e, New Delhi, 2013.
2. MKTG, Hair, J. F., Lamb, C. W., McDaniel, C., Cengage Learning 14th Edition (2025), United States.

Reference Books:

1. Marketing Management Global perspective-Indian Context, V.S. Ramaswamy and S. Namakumari, Mac Millan, 4th Edition, New Delhi.
2. Marketing: Concepts and Cases, Michael J. Etzel, Bruce J. Walker, William J. Stanton and Tapan K. Pandit, Tata McGraw Hill, New Delhi.

Web links:

1. <https://archive.nptel.ac.in/courses/110/104/110104068/>
2. https://onlinecourses.nptel.ac.in/noc22_mg57/preview

RETAIL MARKETING

Course Code: 2517MN07

UNIT-I:

Retailing – Meaning, Nature- Factors Influencing Retailing- Functions of Retailing-Types of Retailing-Retail Formats- Multichannel Retailing-Issues & Challenges; Emergence of Organized Retailing in India. International Retailing- reasons for internationalization- assessment of market environment and Market entry methods.

UNIT-II:

Setting up Retail organization - Store location strategy, factors affecting the Retail location- Research and Techniques. Retail supply chain management- Sourcing and vendor selection- Uncertainty and Inventory Management; Innovations in Supply chain management.

UNIT-III:

Retail consumer behaviour and factors influencing buying behaviour – Segmentation - Targeting- Positioning. Store Layout and Space planning- Types of Layouts-Visual Merchandising- Techniques; Store Facade-Store environment- Exteriors, Interiors - Store Ambience-Store Atmospherics-Impulse Purchase.

UNIT-IV:

Retail Pricing-Pricing Objectives -Pricing Methods-Price Adjustments-Pricing Techniques for Increasing Sales- Sales promotion technique; Human Resource Management in Retailing - Human Resource Planning - Recruitment - Selection - Training -Motivation and Appraisal- Compensation and rewarding store employees- Legal and Regulatory issues.

UNIT-V:

Customer service-Importance- customer complaints- CRM in retailing – process – planning and implementing loyalty programs- Impact of Technology on Retailing; E-tailing-Issues and Challenges- Social Marketing in Retailing.

Text Books:

1. Retailing Management-A Strategic Approach, Barry Berman Joel & R Evans, Pearson Education, 2009.
2. Retailing Management, Michael Levy, Burton A Weitz, Ajay Pundit, The Mc Graw -Hill Companies, 6/e, 2008.

Reference Books:

1. International Retailing, Nicholas Alexander Anne Marie Doherty, Oxford University Press.
2. International Retail Marketing Strategies, RamKishen Y, Jaico Publishing House, 2009.

Web links:

1. https://onlinecourses.nptel.ac.in/noc23_mg100/preview
2. <https://nptel.ac.in/courses/110107167>

SERVICES MARKETING

Course Code: 2517MN08

UNIT-I:

Nature and Scope of Services. Role of Services in Indian Economy; Services Marketing challenges. Classification of services, Service marketing mix, service product continuum, Services and Technology; Consumer behaviour in services.

UNIT-II:

Service product, new service development; Pricing of services- foundations of pricing objectives, pricing and demand; The role of Intermediaries in service delivery, delivering services through electronic channels; Managing Supply and demand- related strategies; Service communication challenges.

UNIT-III:

Service Quality- Gaps model of service Quality; Service Quality Dimensions; Consumer Service Expectations, Service Encounters.

UNIT-IV:

Relationship Marketing

Customer Profitability Segments; Relationship Challenges and Relationship Development Strategies. Employees' Role in Service Delivery; Customers' role in service delivery.

UNIT-V:

Service Recovery – Customer responses to service failures, Customer Recovery Expectations, Service Recovery Strategies; Service Guarantees. Service Blue printing; Physical Evidence – Servicescape effects on behaviour; Physical Evidence Strategy.

Text Books:

1. Services Marketing, Valarie Zeithaml, D D Gremler, et. al., TMH, 4th Edition, New Delhi.
2. Managing Services: Marketing Operations and Human Resources, Lovelock Christopher H., Prentice Hall Inc., Englewood Cliffs, New Jersey, 1993.

Reference Books:

1. Services Marketing, Rajendra Nargundkar, TMH, 3rd Edition, 2008.
2. Services Marketing, Indian Context, R Srinivasan, Prentice Hall.

Web links:

1. https://onlinecourses.nptel.ac.in/noc20_mg12/preview
2. https://onlinecourses.nptel.ac.in/noc20_mg07/preview

MARKETING RESEARCH AND ANALYSIS

Course Code: 2517MN09

UNIT-I:

Introduction to Marketing Research: Introduction: Definition, scope, importance, and role within a Marketing Information System (MkIS). The Research Process: Overview of steps from problem definition to report writing, Formulating the Research Problem: Techniques for defining objectives and research approach, Ethical Issues: Responsibilities and ethical considerations in marketing research.

UNIT-II:

Research Design and Data Collection: Types of Research Design: Exploratory, descriptive, and causal research. Qualitative Research: Focus groups, in-depth interviews, and projective techniques. Data Collection: Primary vs. secondary sources; observational and survey methods. Questionnaire Design: Principles of designing effective questionnaires.

UNIT-III:

Measurement, Scaling, and Sampling: Measurement & Scaling: Assigning numbers/labels, scales such as Likert, semantic differential, constant sum. Sampling Theory: Introduction and process of sampling. Sampling Techniques: Probability (simple random, stratified) and non-probability (convenience, quota). Sample Size Determination: Factors and methods.

UNIT-IV:

Data Analysis: Data Preparation: Cleaning, coding, transcription, and verification. Hypothesis Testing: Testing statistical hypotheses. Statistical Analysis: Bivariate techniques (cross-tabulation, correlation) and introduction to multivariate. Multivariate Techniques: Exploratory factor analysis, cluster analysis, regression.

UNIT-V:

Report Writing and Advanced Applications: Research Report: Structure, components, and presentation guidelines. Applications: Product, pricing, advertising, consumer behavior. Recent Trends: Online marketing research, social media analytics, international research. Specialized Analysis: Conjoint analysis, multidimensional scaling (as applicable).

Text Books:

1. Marketing Research: An Applied Orientation, Naresh K. Malhotra & David F. Birks, Pearson, 7th Edition, 2019.
2. Essentials of Marketing Research, William G. Zikmund & Barry J. Babin, Cengage, 6th Edition, 2015.

Reference Books:

1. Marketing Research: Methodological Foundations, Gilbert A. Churchill Jr. & Dawn Iacobucci, Wiley, 10th Edition, 2013.
2. Marketing Research: Tools and Techniques, Nigel Bradley, Oxford University Press, 4th Edition, 2008.

Web links:

1. <https://nptel.ac.in/courses/110107080>
2. <https://elearn.nptel.ac.in/shop/nptel/marketing-research-and-analysis/>

CUSTOMER RELATIONSHIP MANAGEMENT

Course Code: 2517MN10

UNIT-I:

Introduction to CRM; Concept and Evolution of CRM. Objectives and Benefits of CRM. Types of CRM: Operational, Analytical, Strategic. Customer Life Cycle and Relationship Marketing.

UNIT-II:

CRM Process and Strategy: CRM Process Framework. Customer Identification, Acquisition, Retention, and Development. Building Customer Value and Loyalty. Developing a CRM Strategy.

UNIT-III:

CRM Technology and Tools: Role of Information Technology in CRM. CRM Software Applications and Features, Database Management and Data Warehousing. E-CRM and Mobile CRM.

UNIT-IV:

Customer Analytics and Knowledge Management: Understanding Customer Data and Insights, Customer Segmentation and Profiling, Predictive Modelling and Customer Behaviour Analysis. Knowledge Management in CRM.

UNIT-V:

Emerging Trends and Applications: CRM in Service Industries (Banking, Telecom, Retail, Hospitality). Social CRM and Use of Social Media Platforms. AI and Automation in CRM. Challenges and Future of CRM.

Text Books:

1. Customer Relationship Management: A Strategic Approach to Marketing, V. Kumar & Werner Reinartz, Wiley, 3rd Edition, 2018.
2. Customer Relationship Management: Concepts and Cases, Alok Kumar Rai, PHI Learning, 2nd Edition, 2013.

Reference Books:

1. Handbook of CRM: Achieving Excellence in Customer Management, Payne, A., Butterworth-Heinemann, 2006.
2. Customer Relationship Management: Concepts and Technologies, Buttle, F., & Maklan, S., Routledge, 2019.

Web links:

1. <https://nptel.ac.in/courses/110105054>
2. <https://academy.hubspot.com/courses/crm>

PRODUCT AND BRAND MANAGEMENT

Course Code: 2517MN11

UNIT-I:

Foundations of Product Management: Introduction to Product Management: The role of a product manager, Product hierarchy (need family, product family, class, line, type, item). Product Mix Decisions: width, length, depth, and consistency. The Product Life Cycle (PLC): Stages (Introduction, Growth, Maturity, Decline) and corresponding marketing strategies.

UNIT-II:

New Product Development and Launch: The New Product Development (NPD) Process: Idea generation, idea screening, concept development and testing, marketing strategy development, business analysis, product development, test marketing, and commercialization. Adoption Process and Launch Strategies.

UNIT-III:

Fundamentals of Branding: Introduction to Branding: Definition of a brand, brand vs. product, role of brands for consumers and firms, Brand Equity: Customer-Based Brand Equity (CBBE) model, Brand Identity and Positioning: Developing a brand positioning strategy, brand mantra, points-of-parity and points-of-difference.

UNIT-IV:

Strategic Brand Management: Designing and Implementing Branding Strategies: Choosing brand elements (name, logos, symbols, slogans), Brand Architecture: Branded house vs house of brands, Brand Extensions: Line extensions and category extensions, advantages and disadvantages. Co-branding and Ingredient Branding.

UNIT-V:

Brand Performance and Future Trends: Measuring and Managing Brand Equity: Brand audits, brand tracking studies, and brand valuation methods. Managing Brands Over Time: Reinforcing and revitalizing brands, Digital Branding: Strategies for social media, content marketing, and online presence. Global branding and sustainable/ethical branding.

Text Books:

1. Strategic Brand Management, Kevin Lane Keller, Pearson, 5th Edition, 2020.
2. Marketing Management, Philip Kotler, Kevin Lane Keller, Alexander Chernev, Pearson, 16th Edition, 2022.

Reference Books:

1. Building Strong Brands, David A. Aaker, Free Press, 2009.
2. Positioning: The Battle for Your Mind, Al Ries & Jack Trout, McGraw Hill, 2001.

Web links:

1. https://onlinecourses.nptel.ac.in/noc22_mg107/preview
2. <https://www.coursera.org/specializations/brand-management>

RETAIL MARKETING STRATEGY

Course Code: 2517MN12

UNIT-I:

Foundations of Retail Strategy: The Strategic Retail Management Process: Situation analysis, objectives, identification of consumers, overall strategy. Understanding the Retail Consumer: Demographics, lifestyle trends, shopping attitudes and behaviours. Retail Formats and Ownership Models: Store-based, non-store-based, and service retailing; Independent, chain, and franchise models.

UNIT-II:

Retail Location and Site Selection Strategy: Trading Area Analysis: Identifying and evaluating trading areas using methods like the analog approach and regression analysis. Types of Retail Locations: Unplanned business districts, planned shopping centres, and freestanding locations. Site Selection: Factors influencing site choice, including traffic flow, parking, visibility, and competitive landscape.

UNIT-III:

Merchandise Management and Pricing Strategy: Merchandise Planning: Developing sales forecasts, merchandise budgets, and assortment plans (variety, assortment, product availability). Sourcing and Vendor Management: Selecting sources of supply, negotiating with vendors, and building strategic partnerships. Retail Pricing Strategy: Pricing objectives, developing a pricing strategy (e.g., EDLP vs. high/low), and using pricing tactics like markdowns and promotional pricing.

UNIT-IV:

In-Store Strategy and Operations: Store Layout, Design, and Visual Merchandising: Objectives of the store environment, layout types (grid, racetrack, free-form), and creating an appealing atmosphere through visual merchandising. Customer Service Strategy: Building a sustainable competitive advantage through customer service. Store Management: Managing store employees, controlling costs, and reducing inventory shrinkage.

UNIT-V:

Integrated Retail Communication and Future Trends: Developing the Retail Communication Mix: Advertising, sales promotion, public relations, personal selling, and social media marketing. Multichannel and Omnichannel Strategy: Integrating store, online, and mobile channels to create a seamless customer experience. The Future of Retail: The impact of AI, data analytics, sustainability, and experiential retail on strategy.

Text Books:

1. Retail Management: A Strategic Approach, Barry Berman & Joel R. Evans, Pearson, 13th Edition, 2018.
2. Retailing Management, Michael Levy, Barton A. Weitz, & Dhruv Grewal, McGraw Hill, 10th Edition, 2019.

Reference Books:

1. Why We Buy: The Science of Shopping, Paco Underhill, Simon & Schuster, Revised Edition, 2009.
2. The New Rules of Retail: Competing in the World's Toughest Marketplace, Robin Lewis & Michael Dart, Palgrave Macmillan, 2014.

Web links:

1. <https://nptel.ac.in/courses/110107167>
2. <https://www.coursera.org/learn/wharton-retail-management>
3. <https://nrf.com/>

SUSTAINABLE MARKETING AND CONSUMER BEHAVIOR

Course Code: 2517MN13

UNIT-I:

Foundations of Sustainable Marketing: Introduction to Sustainability: The Triple Bottom Line (People, Planet, Profit). Defining Sustainable Marketing and its evolution from green marketing—the societal marketing concept. Drivers of sustainable marketing: Regulatory pressures, consumer demand, and competitive advantage. The challenge of Greenwashing and how to identify and avoid it.

UNIT-II:

The Sustainable Consumer: Understanding the sustainable consumer: Segmentation, values, and psychographics. Models of Pro-environmental Consumer Behaviour: The Attitude-Behaviour Gap (or Value-Action Gap): Understanding why stated intentions do not always translate into sustainable purchases. The role of social norms, trust, and Perceived Consumer Effectiveness (PCE).

UNIT-III:

The Sustainable Marketing Mix: Product and Price: Sustainable Product Strategy: Principles of sustainable product design, including life-cycle assessment (LCA), cradle-to-cradle design, and circular economy concepts. The role of eco-labels and certifications (e.g., Fair Trade, Organic, B Corp). Sustainable packaging solutions.

Sustainable Pricing Strategy: The concept of true cost accounting. Managing the "Green Price Premium": Pricing strategies to encourage sustainable consumption.

UNIT-IV:

The Sustainable Marketing Mix: Place and Promotion: Sustainable Place (Distribution) Strategy: Green supply chain management and logistics. The importance of local sourcing. Reverse logistics, product take-back programs, and closed-loop supply chains.

Sustainable Promotion (Communication) Strategy: Crafting authentic and transparent sustainability messages. Cause-Related Marketing. The role of digital media and storytelling in communicating sustainability initiatives.

UNIT-V:

Strategic Implementation and Future Trends: Integrating sustainability into corporate strategy: Corporate Social Responsibility (CSR) and Creating Shared Value (CSV), Sustainability reporting and frameworks (e.g., Global Reporting Initiative - GRI). The role of public policy in shaping sustainable markets. Future trends: Collaborative consumption (the sharing economy), the circular economy, and digitalization for sustainability.

Textbooks:

1. Sustainability Marketing: A Global Perspective, Frank-Martin Belz & Ken Peattie, Wiley, 2nd Edition, 2012.
2. Sustainable Marketing, Diane Martin & John Schouten, Pearson, 2014.

Reference Books:

1. Cradle to Cradle: Remaking the Way We Make Things, William McDonough & Michael Braungart, North Point Press, 2002.
2. Doughnut Economics: Seven Ways to Think Like a 21st-Century Economist, Kate Raworth, Chelsea Green Publishing, 2017.

Web links:

1. <https://www.coursera.org/learn/business-sustainability>
2. <https://www.ellenmacarthurfoundation.org/>
3. <https://sustainablebrands.com/>
4. <https://www.bsr.org/en/>

CORPORATE FINANCE

Course Code: 2517MN14

UNIT-I:

The Finance Function: Nature and Scope, Evolution of the Finance Function, Its New Role in the Contemporary Scenario, Goals of the Finance Function, Profit Maximization, and Wealth Maximization; Concept of Time Value of Money, Future Value, Present Value, and Basic Valuation Model.

UNIT-II:

The Investment Decision: Investment Decision Process, Project Generation, Evaluation, Selection, and Implementation. Developing Cash Flow, Data for New Projects, and Capital Budgeting Techniques: Traditional and DCF Methods.

UNIT-III:

Capital Structure and Cost of Capital: Capital Structure Theories: The Modigliani-Miller Theory, NI, NOI Theory, and Traditional Theory; Cost of Capital: Concept, Importance and Measurement of Cost of Capital, Weighted Average and Marginal Cost of Capital.

UNIT-IV:

Dividend Decisions: Factors Determining Dividend Policy, Dividends and Valuation of the Firm, the Basic Models, and Forms of Dividend. Declaration and Payment of Dividends. Bonus Shares, Rights Issue, Share Splits, Major Forms of Dividends, Cash, and Bonus Shares. Dividends and Valuation. Major Theories centred on the works of Gordon, Walter.

UNIT-V:

Working Capital Management: Working Capital Management: Components of Working Capital, Gross vs. Net Working Capital, Determinants of Working Capital Needs, the Operating Cycle Approach. Financing of Working Capital through Bank Finance and Trade Credit.

Textbooks:

1. Corporate finance, Ross, S. A., Westerfield, R. W., Jaffe, J., & Jordan, B. D., McGraw Hill Education, 13th ed., 2021.
2. Principles of corporate finance, Brealey, R. A., Myers, S. C., Allen, F., & Edmans, A., McGraw Hill Education, 14th ed., 2022.

Reference Books:

1. Corporate finance: Cases and materials, Bratton, W. W., West Academic Publishing, 9th ed., 2021.
2. Corporate finance, Haas, J. J., West Academic Publishing, 2nd ed., 2021.

Web Links:

1. https://onlinecourses.nptel.ac.in/noc20_mg31/preview
2. <https://archive.nptel.ac.in/courses/110/107/110107144/>

FINANCIAL SERVICES AND MARKETS

Course Code: 2517MN15

UNIT-I: Financial Services:

Financial system and markets, Nature and scope of financial services, Financial intermediation, Regulatory framework for financial services.

UNIT-II: Asset Financing Services:

Leasing and hire-purchase, Debt securitization, Housing finance, Inter-corporate loans.

UNIT-III: Merchant Banking Services:

Issue market and other services, Corporate advisory services, Market-making process, SEBI guidelines on Merchant banking.

UNIT-IV: Financial Market Operations:

Money market, types of Securities market, Stock exchange operations, Stockbroking services, Role of portfolio managers and registrars, Mutual funds, Regulations of SEBI on mutual fund operations.

UNIT-V: Allied Financial Services:

Venture capital, Insurance services, Factoring, Forfaiting, Discounting, Depository system, Custodian and custodial services, Credit rating - Credit cards.

Textbooks:

1. Financial Markets, Institutions, and Financial Services, Clifford Gomez, PHI, Eastern Economy Edition, 2011.
2. Financial Services, M. Y. Khan, TMH, 2008.

Reference Books:

1. Financial Management, Ravi M. Kishore, Taxmann's, Sixth edition, 2005.
2. Financial Institutions & Markets—Structure, Growth & Innovations, L M Bhole, TMH, 4e, 2010.

Web links:

1. <https://archive.nptel.ac.in/courses/110/105/110105121/>
2. https://onlinecourses.nptel.ac.in/noc23_mg46/preview

SECURITY ANALYSIS & PORTFOLIO MANAGEMENT

Course Code: 2517MN16

UNIT-I:

Introduction to Investment: Concept and forms of investment, Investment vs. Speculation, Security vs. Non-security investment, Investment environment in India, Investment process, Sources of investment information, Security markets (primary & secondary), Types of securities in the Indian capital market, Market indices and calculation of SENSEX & NIFTY.

UNIT-II:

Risk and Return Analysis: Meaning and measurement of security returns, Types of security risks: Systematic vs. Unsystematic, Measurement of total risk, Valuation of bonds, preference shares, and equity shares (Intrinsic Value Approach).

UNIT-III:

Security Analysis: Fundamental analysis (economy, industry, company); Technical analysis: concepts, tools & techniques, Comparison of technical vs. fundamental analysis, Efficient Market Hypothesis: concept and forms of market efficiency.

UNIT-IV:

Portfolio Management: Elements of portfolio management, Markowitz model and efficient frontier, Selection of optimal portfolio, Sharpe single index model, Capital Asset Pricing Model (CAPM), Arbitrage Pricing Theory (APT).

UNIT-V:

Portfolio Evaluation: Performance evaluation of portfolios, Sharpe model, Jensen's model Evaluation of mutual funds.

Textbooks:

1. Security Analysis and Portfolio Management, Kevin S., Sultan Chand & Sons, 2nd Edition, 2019.
2. Security Analysis and Portfolio Management, Prasanna Chandra, PHI Learning, 2nd Edition, 2017.

Reference Books:

1. Security Analysis and Portfolio Management, V.A. Avadhani, Himalaya Publishing House, Revised Edition, 2020 Security Analysis and Portfolio Management
2. Security Analysis and Portfolio Management, Punithavathy Pandian, Pearson Education, 2nd Edition, 2012.

Web links:

1. <https://nptel.ac.in/courses/110/107/110107081>
2. <https://www.sebi.gov.in/>

COMMODITY DERIVATIVES & RISK MANAGEMENT

Course Code: 2517MN17

UNIT-I:

Introduction to Commodities and Derivatives: Meaning and types of commodities. Structure of commodity markets in India and abroad. Evolution and growth of commodity derivatives markets. Commodity exchanges – functions, role, and regulations. Types of commodity derivatives: forwards, futures, options, and swaps.

UNIT-II:

Commodity Futures Market: Mechanics of futures trading, contracts, margining, marking to market. Pricing of commodity futures, cost of carry model, Hedging strategies using commodity futures. Speculation and arbitrage in commodity markets. Role of SEBI and the regulatory framework in India.

UNIT-III:

Commodity Options and Other Derivatives: Basics of commodity options—types, payoffs, and applications. Pricing of options—intrinsic value and time value. Commodity swaps—features, applications, and valuation. Exotic derivatives in commodities. Case studies on commodity derivatives usage.

UNIT-IV:

Risk Management with Commodity Derivatives: Types of risks in commodity markets: price risk, basis risk, credit risk, operational risk. Risk management strategies using futures, options, and swaps. Portfolio risk management and hedging effectiveness. Value at Risk (VaR) in commodity markets. Use of derivatives by corporates, producers, and traders.

UNIT-V:

Contemporary Issues and Applications: Commodity derivatives in agriculture, metals, and energy sectors. Commodity indices and index-based products, Impact of global events on commodity markets, Challenges and prospects of commodity derivatives in India, Emerging trends: electronic trading, algo trading, and integration with global markets.

Textbooks:

1. Commodity Derivatives: Markets and Applications, Wiley India, 1st Edition, 2013.
2. Options, Futures and Other Derivatives, John C. Hull, Pearson, 10th Edition, 2017.

Reference Books:

1. Risk Management and Derivatives, Stulz, René M., Cengage Learning, 1st Edition, 2003.
2. Futures, Options, and Swaps, Kolb, R. W., & Overdahl, J. A., Blackwell Publishing, 5th Edition, 2007.

Web links:

1. <https://www.nseindia.com/market-data/derivatives-market>
2. <https://www.mcxindia.com/>

FINANCIAL TECHNOLOGY

Course Code: 2517MN18

UNIT-I:

Introduction to the FinTech Landscape: Defining FinTech: The intersection of finance and technology - Evolution of FinTech and its disruptive impact on the traditional financial services industry -The FinTech Ecosystem: Key players including startups, financial institutions, technology companies, and regulators - Major segments of FinTech: Payments, Lending, Wealth Management, Insurance, and Capital Markets

UNIT-II:

Core Enabling Technologies: Blockchain and Distributed Ledger Technology (DLT): Fundamentals, consensus mechanisms, - and applications beyond cryptocurrencies. - Cryptocurrencies: Bitcoin, Ethereum, and smart contracts. - Artificial Intelligence (AI) and Machine Learning (ML) in Finance: Applications in credit scoring, fraud detection, algorithmic trading, and customer support (chatbots). APIs and Open Banking: The role of Application Programming Interfaces in creating an interconnected financial ecosystem.

UNIT-III:

Digital Payments and Alternative Finance: The Payments Revolution: Evolution from traditional to digital payments. Payment gateways, digital wallets (e.g., PayPal, Google Pay), and mobile payment systems (e.g., UPI in India). Cross-border payments and remittance innovations. Alternative Finance Models: Peer-to-Peer (P2P) lending, crowdfunding (equity and reward-based), and invoice financing.

UNIT-IV:

FinTech in Specific Verticals: Wealth Tech: Robo-advisors, digital brokerage platforms, and technology-driven asset management.

Insurtech: Innovations in the insurance value chain, including telematics, personalized insurance products, and claims processing automation.

RegTech: The use of technology to enhance regulatory compliance, monitoring, and reporting (e.g., automated KYC and AML checks).

UNIT-V:

Regulatory, Security, and Future Trends: The Regulatory Environment: Global and domestic approaches to FinTech regulation, including regulatory sandboxes. Cybersecurity in FinTech: Major threats and strategies for securing financial data and platforms. The Future of Finance: Decentralized Finance (DeFi), Central Bank Digital Currencies (CBDCs), and the increasing role of Big Tech in financial services.

Textbooks:

1. The Future of Finance: The Impact of FinTech, AI, and Crypto on Financial Services, Henri Arslanian & Fabrice Fischer, Palgrave Macmillan, 2019.
2. The FINTECH Book: The Financial Technology Handbook for Investors, Entrepreneurs and Visionaries, Susanne Chishti & Janos Barberis, Wiley, 2016.

Reference Books:

1. Bank 4.0: Banking Everywhere, Never at a Bank, Brett King, Wiley, 2018.
2. Blockchain Revolution: How the Technology Behind Bitcoin Is Changing Money, Business, and the World, Don Tapscott & Alex Tapscott, Portfolio/Penguin, 2016.

Web links:

1. <https://nptel.ac.in/courses/110105148>
2. <https://www.coursera.org/specializations/fintech-revolution> , <https://www.finextra.com/>

INTRODUCTION TO INDIAN BANKING SYSTEM

Course Code: 2517MN19

UNIT-I:

Indian Financial System – The Financial System, Nature, Evolution and Structure, The functions of Financial Intermediaries, Financial Instruments, The Role of Financial System in Economic Development, The Indian financial System. The Origin and Growth of Banking – History, The Indian Banking System, Commercial Banking in India, functions of Commercial banks, Challenges and trends in banking, Universal banking, CRM in Banks, Role of Banks in Indian **Economy.**

UNIT-II:

Sources and uses of Funds in a Bank: A Bank's Balance Sheet—Statement of Sources and uses of Funds, A bank's Profit and loss Account, Books of Accounts in Banks. Deposit products—Types of bank deposits offered by banks, Interest rates offered on different types of deposits, Composition of bank deposits. Credit policy—Need for Credit policy, Components of Credit Policy, Credit policy pursued by the government, Credit culture. Lending Activities – lending Activity, Basics of Requirements for lending.

UNIT-III:

Retail banking—retail Banking Scenario, Types of consumer Loans, Limitations of Credit Scoring. Corporate Banking—The nature of corporate banking, Developments in Corporate banking, Consortium finance, multiple banking Arrangements, loan Syndication, The Syndication process. Rural Banking—Sources of Rural Finance, Credit Delivery Mechanism in Rural Finance, Multi-Agency Approach, Regional Rural Banks (RRBs), Service Area Approach (SAA), National Bank for Agriculture and Rural Development (NABARD).

UNIT-IV:

Securitization—Meaning Securitization, Process of Securitization, Fee-based Services—Letters of Credit—Bank Guarantees, Subsidiary Services, and Off-Balance Sheet Activities. Plastic money—introduction, parties to the transaction, Salient Features, concepts of a Credit Card, Distinction between credit card, charge Card, Debit card and Operational aspects, product Augmentation, Credit card business in India: the Emerging Scenario. Management of IPO—reasons for going public, management of public issues and initial public offerings, Marketing of Issues, Post, issue Activities.

UNIT-V:

Regulatory Framework: RBI, Structure, Role of RBI, Banking Regulation and Supervision, Monetary Policy, Banking Regulation Act – SEBI. Banking Law and Regulations—Legal aspects of banking operations, Banking related laws. Banking regulation Act, 1949 – Banking Ombudsman Scheme 2006, Business prohibited for banks, licensing of banking companies, Restrictions on loans and Advances, Management of banking Companies.

Textbooks:

1. Indian Financial System, M. Vohra, Anmol Publications.
2. Banking Law and Practice in India, P.N. Varshney, Sultan Chand & Sons, 24th Edition, 2010.

Reference Books:

1. Financial Institutions and Markets- Structure, Growth and Innovations, L.M. Bhole & Jitendra Mahakud, Tata Mc Graw Hill, 5th Edition.
2. Bank Management and Financial Services, Peters S. Rose and Sylvia C. Hudgins, Tata Mc Graw Hill, 7th Edition.

Web links:

1. <https://nptel.ac.in/courses/110106040>
2. <https://archive.nptel.ac.in/courses/110/106/110106040/>

HUMAN RESOURCE MANAGEMENT

Course Code: 2517MN20

UNIT-I:

Introduction: Importance and Functions, Scope of HRM, Human Resource Management in a changing environment; **Manpower Planning:** Manpower planning process, Job Description and Job Specification, Job Analysis and Job Design; **Techniques of Job Design.**

UNIT-II:

HR Processes: Recruitment, Employee Selection and Induction, Training and Development, Performance Appraisal, Appraisal Interviews.

UNIT-III:

Compensation Planning: Employee Compensation, Job Evaluation, Employee Benefits and Welfare, Compensation and Salary Administration.

UNIT-IV:

Employee Relations: Employee Discipline, Suspension, Dismissal, and Retrenchment; Employee Grievance Handling, Trade Unionism, Collective Bargaining, Industrial Democracy. Governance Integration and Separation.

UNIT-V:

New Trends in HRM: HRM in India, HRM in International Firms, Talent Management, HR Accounting, HR Audit, HRIS, Flexible Work Arrangement, Employee Engagement, Work-Life Balance, Outsourcing, Employer and Employee Branding.

Textbooks:

1. Human Resource Management, Dessler, Pearson Education, Eleventh edition, New Delhi, 2011.
2. Human Resource Management, S.S. Khanka, S. Chand & Company Ltd., New Delhi, 2019.

Reference Books:

1. Human Resource Management, Raymond Andrew Noe, John R. Hollenbeck, Barry Gerhart, Patrick M Wright, The McGraw Hill Pub, 8th Ed., 2012.
2. Managing Human Resources, Louis & Gomitz Mejia et al., Pearson Education, 7th Ed., 2011.

Web links:

1. <https://archive.nptel.ac.in/courses/110/105/110105069/>
2. https://onlinecourses.nptel.ac.in/noc21_mg21/preview

ORGANISATIONAL BEHAVIOUR

Course Code: 2517MN21

UNIT-I:

Foundations of Individual Behaviour: Meaning, scope, challenges, and opportunities of Organizational Behaviour (OB). Foundations of Individual Behaviour: Ability, Biographical Characteristics, Values, Attitudes (components and link to behaviour), Job Satisfaction, Personality (MBTI, Big Five Model), Perception and Individual Decision Making, Emotions, and Moods in the Workplace.

UNIT-II:

Motivation and Group Dynamics: Motivation Concepts: Early Theories of Motivation (Maslow's Hierarchy, Herzberg's Two-Factor Theory, McClelland's Theory of Needs); Contemporary Theories of Motivation (Goal-Setting Theory, Self-Efficacy Theory, Equity Theory, Expectancy Theory); Applying Motivation through Job Design (The Job Characteristics Model).

Group Behaviour: Defining and Classifying Groups, Stages of Group Development, Group Properties (Roles, Norms, Status, Size, Cohesiveness), Group Decision Making (Strengths, Weaknesses, Groupthink, Group Shift).

UNIT-III:

Conflict and Negotiation: Organizational Conflict: Definition of Conflict, The Conflict Process, Types of Conflict (Functional vs. Dysfunctional), Conflict Management Techniques. **Negotiation:** Bargaining Strategies (Distributive vs. Integrative Bargaining), The Negotiation Process, The Role of Personality and Moods in Negotiation, Third-Party Negotiations (Mediator, Arbitrator, Conciliator).

UNIT-IV:

Organizational Change and Development: Organizational Change: Forces for Change, Managing Planned Change (Lewin's Three-Step Model and Kotter's Eight-Step Plan for Implementing Change), Resistance to Change (Sources of resistance and tactics to overcome it).

Organizational Development: Concept and objectives of OD, OD Interventions (Survey Feedback, Team Building, Process Consultation, Intergroup Development).

UNIT-V:

Leadership, Culture, and Stress Management: Leadership: Trait Theories, Behavioural Theories (Ohio State & Michigan Studies), Contingency Theories (Fiedler Model), Charismatic and Transformational Leadership.

Organizational Culture: Defining and Creating an Organizational Culture, Functions of Culture, Types of Culture, Creating an Ethical Organizational Culture.

Managing Stress: Sources of Stress (Potential Environmental, Organizational, and Personal Stressors), Consequences of Stress, Individual and Organizational Approaches to Managing Stress.

Text Books:

1. Organizational Behaviour, Stephen P. Robbins & Timothy A. Judge, Pearson, 19th Edition (Global Edition), 2023.
2. Organisational Behaviour, K. Aswathappa, Himalaya Publishing House, 14th Edition, 2023.

Reference Books:

1. Essentials of Organizational Behaviour, Stephen P. Robbins & Timothy A. Judge, Pearson, 15th Edition.
2. Organizational Behaviour: Human Behaviour at Work, John W. Newstrom 14th edition 2014, New York

Web Links:

1. <https://www.simplypsychology.org/scheins-process-consultation.html>
2. <https://www.td.org/atd-blog/10-team-building-activities-that-actually-work>

ORGANIZATION CHANGE AND DEVELOPMENT

Course Code: 2517MN22

UNIT-I:

Introduction to Organizational Change: The nature of Organizational change, Forces of change, Levels of change—individual, group, and organizational; Planned change vs. Unplanned change, Models of Organizational Change—Lewin’s Force Field Analysis, Kotter’s 8-Step Model, Action Research Model.

UNIT-II:

Resistance to Change: Reasons for the resistance, overcoming resistance for the change, Systematic approach to making change, Factors for effective change, Strategies and Skills of leaders for Communicating Change, Designing the change, Implementing Change, Consolidating Change.

UNIT-III:

Organization Development (OD): Introduction to Organization Development, History of OD, Evolution of OD, Process of OD, Challenges to OD, Entering into OD Relationship, Developing a contract, Diagnosing Organizations, Diagnostic Strategies and Skills, Power, Politics and Ethics in OD, Evaluating change and future of Organizational Development, OD Change Agents.

UNIT-IV:

Organization Development Interventions: Definition, Types, and Process of OD Intervention, Results of OD, Actors to be considered, Choosing and sequencing intervention activities, Typology of interventions based on target groups, Human Process interventions, Structural and Miscellaneous OD Interventions, IT and OD, TQM and OD, Organizational Creativity, OD in International Context.

UNIT-V:

Perspectives of Organization Development: Learning Organization, Knowledge Management and OD, Organizational Design and Work Culture, Organizational Restructuring.

Textbooks:

1. Managing Changing Organisations, Nilanjan Sengupta, PHI Learning, New Delhi, 2006.
2. Managing Change, Adrian Thornhill, Pearson Education, New Delhi, 2002.

Reference Books:

1. Theory of Organisation Development and Change, Cummings, Cengage Learning, New Delhi. 2014.
2. Change Management, Robert A Paton, Sage Publications, New Delhi, 2008.

Web Links:

1. <https://archive.nptel.ac.in/courses/110/101/110101146/>
2. <https://archive.nptel.ac.in/courses/110/101/110101146/>

COMPENSATION AND REWARD MANAGEMENT

Course Code: 2517MN23

UNIT-I:

Compensation Management: An Introduction to Compensation Management, Theories of Compensation Management, the 3-P Concept in Compensation Management, Strategic Compensation Management, Strategic and Tactical Compensation Issues.

UNIT-II:

Job Design, Job Evaluation, and Compensation Structures: Job Analysis & Design, Job evaluation and methods, understanding market pay and benchmarking, latest pay band - Base pay, performance-based pay, Broad banding, Pay-for-Skills/Skill-Based Pay, Competency-Based Pay, Team-Based Pay, Pay Transparency and Equity Trends, Hybrid Pay Structures.

UNIT-III:

Benefits and Services: Employee benefits and rewards, long-term and Short-term benefits and rewards, Administration of benefits and the influencing factors, Employee welfare and services.

UNIT-IV:

Legalization and Compensation: The legislative process—Payment of Wages Act 1936, Employees Insurance Act 1948, Workers Compensation Act 1923, Employees Provident Fund Act 1952.

UNIT-V:

Executive and International Compensation: Executive compensation—concepts and elements, Quantitative tools, Expatriate Compensation and its Objectives, Elements of Expatriate's Compensation Package, Laws relating compensation.

Textbooks:

1. Compensation and Reward Management: Wage and Salary Administration and Benefits, Sharma, R. C., & Sharma, S., Routledge India, 2024.
2. MMPH-007: Compensation and Reward Management (IGNOU Study Guide Book), Kamaksha, Gyaniversity Publications, 2024.

Reference Books:

1. Compensation & Reward Management, Ghosh, B., Sterling Publishers (P) Ltd., 2022.
2. Compensation and Reward Management, Shaikh, M. W., eBooks2go, 2022.

Web Links:

1. <https://dituniversity.digimat.in/nptel/courses/video/110105069/L10.html>
2. <https://www.investopedia.com/terms/s/say-on-pay.asp>

PERFORMANCE AND REWARD MANAGEMENT

Course Code: 2517MN24

UNIT-I:

Introduction to Performance Management: Concept, objectives, and importance of performance management. Difference between performance appraisal and performance management. Performance management cycle: Planning, monitoring, reviewing, and rewarding. Linkage of performance management with organizational strategy.

UNIT-II:

Performance Planning and Measurement: Goal setting and performance planning. Key Performance Indicators (KPIs) and performance standards. Competency mapping and role clarity. Methods of measuring individual and team performance.

UNIT-III:

Performance Appraisal and Development: Traditional and modern methods of performance appraisal. 360-degree feedback, Management by Objectives (MBO), and Balanced Scorecard. Performance review meetings and feedback mechanisms. Linking performance appraisal with employee training and development.

UNIT-IV:

Reward Management System: Concept and objectives of reward management. Components of reward systems: Financial and non-financial rewards. Job evaluation, pay structures, and incentive plans. Linking rewards with performance and organizational goals.

UNIT-V:

Contemporary Issues and Strategic Linkages: Strategic performance management and high-performance work systems. Global trends in performance and reward management. Legal and ethical issues in performance and reward practices.

Textbooks:

1. Performance Management, Herman Aguinis, Pearson Education, 4th Edition, 2019.
2. Performance Management and Reward Systems, Michael Armstrong, Kogan Page, 5th Edition, 2018.

Reference Books:

1. Compensation, Milkovich, G.T., Newman, J.M., & Gerhart, B., McGraw Hill, 12th Edition, 2016.
2. Human Resource Management, Dessler, G., Pearson, 15th Edition, 2020.

Web links:

1. <https://www.mckinsey.com/>
2. <https://www.investopedia.com/terms/p/performancemanagement.asp>

HR ANALYTICS AND STRATEGIC HRM

Course Code: 2517MN25

UNIT-I:

Introduction to Strategic HRM and HR Analytics: Defining Strategic Human Resource Management (SHRM): The evolution from traditional personnel management to SHRM, - The Resource-Based View (RBV) of the firm and its application to HR, - Aligning HR strategy with business strategy, Introduction to HR Analytics: The evolution from HR metrics to predictive analytics, The LAMP framework (Logic, Analytics, Measures, Process) for data-driven HR.

UNIT-II:

HR Data, Metrics, and Measurement: Sources of HR Data: Human Resource Information Systems (HRIS), surveys, and external data. Data quality and governance in HR, Foundational HR Metrics: Measuring efficiency and effectiveness in key areas like recruitment (Time-to-Hire, Cost-per-Hire), turnover (Turnover Rate, Retention Rate), and compensation (Compa-ratio). Developing an HR Measurement Framework and HR Scorecard.

UNIT-III:

Descriptive and Diagnostic Analytics in HR Functions: Talent Acquisition Analytics: Analyzing the recruitment funnel, source effectiveness, and quality of hire.
Performance Analytics: Using data to analyze performance distributions, identify high-potentials (9-box grid), and understand drivers of performance.
Employee Engagement Analytics: Analyzing employee survey data to identify key drivers of engagement and satisfaction, diagnosing areas for improvement.

UNIT-IV:

Predictive HR Analytics for Strategic Decision Making: Workforce Planning and Forecasting: Using statistical models to forecast talent supply and demand.
Predictive Turnover Modelling: Identifying the key factors that predict employee turnover and developing proactive retention strategies.
Succession Planning Analytics: Using data to identify leadership potential and assess bench strength. Analyzing career pathing and internal mobility.

UNIT-V:

Implementing HR Analytics and Measuring Business Impact: Data Visualization and Storytelling: Using tools like Tableau or Power BI to create effective HR dashboards. Communicating analytical insights to stakeholders to drive change.
Measuring HR ROI: Calculating the financial return on investment of HR initiatives (e.g., training programs, wellness initiatives).
Ethics and Governance: Addressing privacy, ethical considerations, and potential biases in HR analytics. The future of HR analytics and the role of AI.

Textbooks:

1. Predictive HR Analytics: Mastering the HR Metric, Martin R. Edwards & Kirsten Edwards, Kogan Page, 2nd Edition, 2019.
2. The New HR Analytics: Predicting the Economic Value of Your Company's Human Capital Investments, Jac Fitz-enz, AMACOM, 2010.

Reference Books:

1. Human Capital Analytics: How to Harness the Potential of Your Organization's Greatest Asset, Gene Pease, Boyce Byerly, & Jac Fitz-enz, Wiley, 2013.
2. Investing in People: Financial Impact of Human Resource Initiatives, Wayne Cascio & John Boudreau, FT Press, 2nd Edition, 2011.

Web links:

1. <https://nptel.ac.in/courses/110105178>
2. <https://www.coursera.org/learn/people-analytics> <https://www.aihr.com/blog/>

SUPPLY CHAIN MANAGEMENT

Course Code: 2517MN26

UNIT-I:

Understanding the supply chain, what is supply chain, Objectives & Importance of supply chain, Decision phases in supply chain, Process view of supply chain, Drivers of supply chain.

UNIT-II:

Designing Distribution Networks, the role of distribution in the supply chain, Factors influencing distribution network, Design options for distribution Network, E-Business and the distribution network, Distribution channels for FMCG sector, Transportation issues, Factors influencing network design decisions, Models for facility location and Network optimization models.

UNIT-III:

Demand forecasting and Aggregate Planning, Methods & Characteristics of Demand, Forecasting, forecasting techniques, Time series forecasting methods, Static forecasting method, Adaptive forecasting method, Measures of forecasting error. The role of Aggregate planning in SCM, Aggregate Planning strategies, Aggregate Planning using linear Programming, The Role of It in Aggregate planning, Implementing Aggregate planning in practice.

UNIT-IV:

Managing Inventories in Supply Chain, Cycle Inventory, estimating cycle Inventory cost, Economies of scale to exploit fixed costs and, Quantity discounts, short term discounting, Trade promotions, Safety Inventory in Supply chain uncertainties, the role of IT in Inventory Management, Estimating & Managing safety Inventory in Practice. E Business and the supply chain, Impact Internet on a supply chain, Revenue impact of E-Business. Types of E business, E Commerce, E procurement E collaboration, Implementing the E Business proposition.

UNIT-V:

Transportation and Sourcing in SCM, Role of transportation in SCM, Transportation Infrastructure and policies, Design options for Transportation network and Trade-offs, Risk Management Transportation decisions in practice, Sourcing in SCM, In house or out source, Third party and fourth party logistics. Returns management, Reverse logistics, Packaging return and reuse, Strategic return process. Contracts, Risks sharing and supply chain performance analysis, vendor analysis, the procurement process, Integrated Supply chain Management – Lack of coordination and the Bullwhip Effect, Obstacles to coordination in a supply chain building strategic partnership and trust within a supply chain.

Textbooks:

1. Supply chain Management – strategy Planning and operation, Chopra, S., and P. Meindl, Pearson Education Inc., 4th Edition, 2010.
2. Logistics and supply chain Management: Cases and concepts, Raghuram, G. and N. Rangaraj, Macmillan, New Delhi, 2010.

Reference Books:

1. Designing and Managing the supply chain: Concepts, strategies and case studies, Simchi-Levi,

- D., P. Kaminski and E. Simchi-Levi, Irwin, McGraw-Hill, 2nd edition.
2. Modelling the supply chain, Shapiro, J., Duxbury Thomson Learning.

Web links:

1. https://onlinecourses.nptel.ac.in/noc24_hs128/preview
2. <https://nptel.ac.in/courses/110106045>

OPERATIONS AND SUPPLY CHAIN MANAGEMENT

Course Code: 2517MN27

UNIT-I:

Introduction to Operations and Supply Chain Management

Overview and evolution of operations and supply chain management - Strategic role of operations in business competitiveness - Link between operations strategy and supply chain strategy - Key performance indicators (KPIs) for operational excellence

UNIT-II:

Process Design and Capacity Planning

Types of processes: project, job-shop, batch, assembly, continuous - Process mapping and analysis tools for operational improvement - Capacity planning approaches: lead, lag, and match strategies - Lean systems, Six Sigma, and continuous process improvement

UNIT-III:

Supply Chain Network Design and Inventory Management

Designing supply chain networks: location, transportation, and distribution - Inventory classification and control models: EOQ, ROP, JIT - Demand forecasting methods: qualitative and quantitative approaches - Inventory optimization and managing supply-demand variability.

UNIT-IV:

Logistics, Procurement, and Supplier Relationship Management

Logistics management: transportation modes, warehousing, and distribution - Procurement planning, sourcing strategies, and cost control - Supplier selection, evaluation, and relationship management - Global logistics issues: customs, tariffs, and international sourcing

UNIT-V:

Operations Performance, Risk Management, and Sustainability

Operational performance measurement and benchmarking tools - Risk identification, assessment, and mitigation in supply chains - Sustainable practices: green logistics and reverse logistics - Role of digital technologies: AI, IoT, and blockchain in operations

Textbooks:

1. Operations Management, Jay Heizer & Barry Render, Pearson Education, 12th Edition, 2017.
2. Operations and Supply Chain Management, F. Robert Jacobs & Richard B. Chase, McGraw Hill, 16th Edition, 2020.

Reference Books:

1. Supply Chain Logistics Management, Donald J. Bowersox, David J. Closs & M. Bixby Cooper, McGraw Hill, 5th Edition, 2018.
2. Production and Operations Management, S. N. Chary, Tata McGraw Hill, 2nd Edition, 2009.

Web links:

1. <https://nptel.ac.in/courses/110106045>
2. <https://cscmp.org/>

PRODUCTION AND OPERATIONS MANAGEMENT

Course Code: 2517MN28

UNIT-I:

Introduction to Production & Operations Management: Nature, scope, and importance of Production and Operations Management (POM). Role of operations in enhancing business competitiveness. Types of production systems – Job, Batch, Mass, and Continuous production. Product design and process selection.

Unit-II:

Facility Planning & Layout: Plant location - Factors influencing plant location decisions. Facility layout - Product, Process, Fixed, and Cellular layouts. Line balancing and layout design techniques. Capacity planning and facility planning strategies.

UNIT-III:

Production Planning & Control: Objectives, functions, and stages of Production Planning and Control (PPC). Forecasting techniques for production planning. Aggregate planning and master production scheduling. Material Requirement Planning (MRP) and Enterprise Resource Planning (ERP).

UNIT-IV:

Materials & Inventory Management: Types of inventories and inventory control techniques. Economic Order Quantity (EOQ), ABC and VED analysis. Just-in-Time (JIT) and Lean systems. Supply chain concepts and vendor management.

UNIT-V:

Quality & Maintenance Management: Quality concepts - TQM, Six Sigma, and ISO standards. Statistical Quality Control (SQC) and control charts. Maintenance management - Preventive, Predictive, and Breakdown maintenance. Emerging trends - Automation, Industry 4.0, and Sustainability in operations.

Textbooks:

1. Production and Operations Management, K. Aswathappa & K. Shridhara Bhat, Pearson Education, 8th Edition, 2020.
2. Production and Operations Management, S. Anil Kumar & N. Suresh, PHI Learning, 2nd Edition, 2015.

Reference Books:

1. Production and Operations Analysis, Steven Nahmias, McGraw Hill, 7th Edition, 2011.
2. Modern Production/Operations Management, Elwood S. Buffa & Rakesh K. Sarin, Wiley India, 8th Edition, 2012.

Web links:

1. <https://nptel.ac.in/courses/110/105/110105153/>
2. <https://www.coursera.org/learn/wharton-operations>

SERVICE MANAGEMENT: INTEGRATING STRATEGY, OPERATIONS, AND TECHNOLOGY

Course Code: 2517MN29

UNIT-I:

Introduction to Service Management: Concept and characteristics of services, Role and importance of the service sector in the economy, Service strategy: competitive advantage through services, Service design and development - service blueprinting and service innovation.

UNIT-II:

Service Strategy & Operations: Linking service strategy to operations, - Service quality dimensions – SERVQUAL model, Customer expectations and perceptions of service, Managing demand and capacity in services, - Service process design - front office vs. back office.

UNIT-III:

Technology in Services: Role of information technology in service delivery, - Self-service technologies and automation in services, - E-services and digital transformation. Customer relationship management (CRM) and technology integration, - Service recovery and technology-enabled solutions.

UNIT-IV:

Service Supply Chains & Performance: Service supply chain management concepts, - Outsourcing, offshoring, and global service delivery models, - Measuring service productivity and efficiency. Service performance metrics and balanced scorecard, - Benchmarking best practices in service organizations.

UNIT-V:

Emerging Trends & Applications: Innovation in services and service ecosystems, Sustainability in service management, - Customer experience management (CEM). Role of AI, big data, and analytics in services, - Case studies of service leaders (banking, healthcare, IT, hospitality).

Textbooks:

1. Service Management: Operations, Strategy, Information Technology, James A. Fitzsimmons & Mona J. Fitzsimmons, McGraw Hill, 8th Edition, 2020.
2. Service Management and Marketing: Managing the Service Profit Logic, Christian Grönroos, Wiley, 5th Edition, 2019.

Reference Books:

1. Services Marketing: Integrating Customer Focus Across the Firm, Valarie A. Zeithaml, Mary Jo Bitner & Dwayne Gremler, McGraw Hill, 8th Edition, 2021.
2. Managing Services: Marketing, Operations, and Human Resources, Christopher H. Lovelock & Jochen Wirtz, Pearson, 2nd Edition, 2011.

Web links:

1. <https://www.coursera.org/specializations/service-management>
2. <https://online.hbs.edu/courses/service-operations/>

DATA MINING FOR BUSINESS DECISIONS

Course Code: 2517MN30

UNIT-I:

Introduction to Data Mining: Introduction Scope of Data Mining, what is Data Mining How Does Data Mining Works, Predictive Modelling, Data Mining and Data Warehousing, Architecture for Data Mining: Profitable Applications Data Mining Tools.

UNIT-II:

Business Intelligence: Introduction, Business Intelligence, Business Intelligence Tools, Business Intelligence Infrastructure, Business Intelligence Applications, BI versus Data Warehouse, BI versus Data Mining- Future of BI.

Data Preprocessing: Introduction- Data Preprocessing Overview- Data Cleaning - Data Integration and Transformation - Data Reduction Discretization and Concept Hierarchy Generation.

UNIT-III:

Data Mining Techniques an Overview: Introduction-- Data Mining, Data Mining Versus Database Management System, Data Mining Techniques Association Rules Classification, Regression, Clustering Neural networks.

Clustering: Introduction Clustering Cluster Analysis, Clustering Methods, K-means Hierarchical clustering, Agglomerative clustering, Divisive clustering, clustering and segmentation software evaluating clusters.

UNIT-IV:

Web Mining: Introduction Terminologies Categories of Web Mining, Web Content Mining, Web Structure Mining, Web Usage Mining, Applications of Web Mining and Agent based and Data base approaches Web mining Software.

UNIT-V:

Applications of Data Mining: Introduction-- Business Applications Using Data Mining Risk management and targeted marketing, Customer profiles and feature construction medical applications (diabetic screening) Scientific Applications using Data Mining Other Applications.

Textbooks:

1. Data mining for business analytics: Concepts, techniques, and applications in Python, Shmueli, G., Bruce, P. C., Gedeck, P., & Patel, N. R., Wiley, 2020.
2. Principles of data mining, Bramer, M., Springer, 3rd ed., 2020.

Reference Books:

1. Data mining for business applications, Cao, L., Yu, P. S., Zhang, C., & Zhang, H. (Eds.), Springer, 2009.
2. Data mining for business applications, Soares, C., & Ghani, R. (Eds.), IOS Press, 2010.

Web Links:

1. https://onlinecourses.nptel.ac.in/noc21_cs06/preview
2. <https://ggsestc.digimat.in/nptel/courses/video/110105089/L39.html>

BUSINESS ANALYTICS

Course Code: 2517MN31

UNIT-I:

Introduction to Business Analytics: Evolution of Business analytics, scope, Data for Business Analytics, Models in Business Analytics, problem solving with business analytics- Types of data, Integrating Analytics with business, Business Analytics for Competitive Advantage, Descriptive, Predictive, and Prescriptive Analytics, Dashboards Business Analytics Process Cycle.

UNIT-II:

Analytics on Spreadsheets: Basic Excel, Excel formulas, Excel functions, data queries.

Descriptive Analytics: Descriptive statistical measures, populations and samples, statistical notations, measures of location, dispersion, and association.

Statistical Inference: Hypothesis testing, one-sample test, two-sample test, two-tailed hypothesis for mean, ANOVA.

Predictive Analytics: Simple linear regression, multiple linear regression, residual analysis, building regression models, regression with categorical independent variables.

UNIT-III:

Machine Learning: Supervised Learning and Unsupervised Learning, Clustering & Segmentation, Affinity/ Association Analysis, Data Reduction, Visual Analytics and Data Visualization.

Prescriptive Analytics: Building Linear Optimization models, Implementing Linear Optimization models on spreadsheets, Solving Linear Optimization models.

UNIT-IV:

Marketing Analytics: Models and metrics- Market Insight – Market data sources, sizing, PESTLE trend analysis, and porter five forces analysis - Market basket Analysis, Text Analytics, Spreadsheet Modeling - Sales Analytics: E Commerce sales mode, sales metrics, profitability metrics and support metrics.

UNIT-V:

Introduction to Big Data: Master Data Management. Data Mining on what kind of data, what kinds of patterns can be mined, which technologies are used, which kinds of applications are targeted, Major issues in Data Mining. Getting to know your Data: Data Objects and Attribute Types, Basic Statistical Descriptions of Data, Data Visualization, Measuring data Similarity and Dissimilarity.

Textbooks:

1. Business analytics, Camm, J. D., Cochran, J. J., Fry, M. J., & Ohlmann, J. W., Cengage Learning, 4th ed., 2021.
2. Business analytics, Jaggia, S., Kelly, A., Lertwachara, K., & Chen, L., McGraw Hill Education, 2nd ed., 2025.

Reference Books:

1. Business analytics: A complete guide – 2021 edition, Blokdyk, G., 5STARCOoks, 2021.
2. Introduction to business analytics, Nabavi, M., Olson, D. L., & Boyce, W. S., Business Expert Press, 2nd ed., 2021.

Web Links:

1. <https://archive.nptel.ac.in/courses/110/105/110105089/>
2. https://onlinecourses.nptel.ac.in/noc24_cs65/preview