

MOHAN BABU UNIVERSITY

Sree Sainath Nagar, Tirupati – 517 102



DREAM. BELIEVE. ACHIEVE

SCHOOL OF COMMERCE AND MANAGEMENT

M.B.A – Master of Business Administration (Business Analytics)

CURRICULUM AND SYLLABUS *(From 2025-26 Admitted Students)*

FULLY FLEXIBLE CHOICE BASED CREDIT SYSTEM (FFCBCS)

Vision

To be a globally respected institution with an innovative and entrepreneurial culture that offers transformative education to advance sustainability and societal good.

Mission

- ❖ Develop industry-focused professionals with a global perspective.
- ❖ Offer academic programs that provide transformative learning experience founded on the spirit of curiosity, innovation, and integrity.
- ❖ Create confluence of research, innovation, and ideation to bring about sustainable and socially relevant enterprises.
- ❖ Uphold high standards of professional ethics leading to harmonious relationship with environment and society.

SCHOOL OF COMMERCE AND MANAGEMENT

Vision

To be the preferred choice for commerce and management education recognised for excellence, innovation, entrepreneurship and societal consciousness

Mission

- ❖ Impart relevant knowledge of commerce and management, a broad set of skills, and an inquisitive attitude to provide appropriate and distinctive solutions to serve industry and community
- ❖ Offer an experience par excellence with our state-of-the-art research, innovation, and incubation ecosystem to realise our learners' fullest entrepreneurial potential
- ❖ Provide continued education and research support to working professionals in the field of commerce and management to augment their domain expertise in the cutting-edge technologies used for business developments
- ❖ Inculcate the true spirit of societal consciousness in managers of tomorrow in solving challenges in commerce and management.

DEPARTMENT OF MANAGEMENT

Vision

To become the centre of excellence for management education and research in the country, wherein learners are empowered with the advanced management knowledge to effectively utilise their potential in their career and as entrepreneurs for betterment of the society.

Mission

- ❖ To provide management knowledge to instil the spirit of curiosity, compassion, courage and commitment through effective teaching learning process.
- ❖ To uphold the leadership excellence among the learners through research and mentoring.
- ❖ To create an effective learning environment that empowers the learners with the right blend of skills with theory and practice to build a dynamic society.

M.B.A. – Master of Business Administration (Business Analytics)

PROGRAM EDUCATIONAL OBJECTIVES

After few years of graduation, the graduates of M.B.A. MBA(BA) Syllabus - MBU 25 will:

- PEO1.** Pursue higher education in the field of management in functional areas - Marketing, Finance and Human Resources and, Business Analytics, Digital Transformation, International business, Logistics and supply chain management or any other areas of their interest.
- PEO2.** Solve key challenges of management in general and functional areas in particular through professional career in industry/teaching/research.
- PEO3.** Get inspiration to engage in entrepreneurial career.
- PEO4.** Manage teams through effective leadership skills.
- PEO5.** Exhibit societal consciousness and ethical behaviour in practicing management along with learnability.

PROGRAM OUTCOMES

On successful completion of the Program, the graduates of M.B.A. (B.A.) will be able to:

- PO1.** Apply knowledge of management theories and practices to solve business problems.
- PO2.** Foster Analytical and critical thinking abilities for data-based decision making.
- PO3.** Develop Value based Leadership.
- PO4.** Ability to understand, analyze and communicate global, economic, legal, and ethical aspects of business.
- PO5.** Ability to lead themselves and others in the achievement of organizational goals, contributing effectively to a team environment.
- PO6.** Analyze business and organizational situations using ethical approaches and legal implications to decision making.
- PO7.** Foster collaborative innovative ideas, products, solutions, and competitive strategies tailored to dynamic market environments.

M.B.A. – Master of Business Administration
(Business Analytics)

Basket Wise - Credit Distribution

S. No.	Basket	Credit Contribution (Min. - Max.)
1	SCHOOL CORE	21-32
2	PROGRAM CORE	24-36
3	PROGRAM ELECTIVE	12-18
4	SPECIALISATION ELECTIVE	18-24
5	UNIVERSITY ELECTIVE	3-9
TOTAL CREDITS		Min. 90

School Core (21 - 32 Credits)

Course Code	Title of the Course	Lecture	Tutorial	Practical	Project based Learning	Credits	Pre-requisite
		L	T	P	S	C	
25MG201001	Business Statistics	3	-	-	-	3	-
25MG201002	Economics for Managers	3	-	-	-	3	-
25MG201003	Management and Organisational Behaviour	3	-	-	-	3	-
25MG201004	Entrepreneurship and New Business Models	3	-	-	-	3	-
25MG201005	Legal Aspects of Business	3	-	-	-	3	-
25MG201006	Information Technology for Managerial Applications	3	-	-	-	3	-
25MG201007	International Business	3	-	-	-	3	-
25MG201008	Management Information System	3	-	-	-	3	-
25MG201009	Career Planning and Development	3	-	-	-	3	-
25MG111001	Field Immersion Program	-	-	-	-	4	-
25MG201010	Data Analysis using Spread Sheets	3	-	-	-	3	-
Mandatory Courses (Min. 4 Credits) Earned Credits will not be added for CGPA							
25MG207058	Aptitude Training	2	-	-	-	2	-
25LG207601	Technical Report Writing	2	-	-	-	2	-
25MG207602	Essentials of Business Etiquettes	2	-	-	-	2	-
25CB207601	Essentials of Cyber Security *	2	-	-	-	2	-

* Compulsory Course

Program Core (24 – 36 Credits)

Course Code	Title of the Course	Lecture	Tutorial	Practical	Project based Learning	Credits	Pre-requisite
		L	T	P	S	C	
25MG201011	Risk Management and Insurance	3	-	-	-	3	-
25MG201012	Design Thinking	3	-	-	-	3	-
25MG201013	Sustainable Business Management	3	-	-	-	3	-
25MG201014	Strategic Management	3	-	-	-	3	-
25MG201015	Financial Accounting for Managers	3	-	-	-	3	-
25MG201016	Financial Management	3	1	-	-	4	Financial Accounting for Managers
25MG201017	Human Resource Management	3	-	-	-	3	-
25MG201018	Marketing Management	3	-	-	-	3	-
25MG201019	Production and Operations Management	3	-	-	-	3	-
25MG201020	Business Research Methodology	3	-	-	-	3	-
25MG201021	Operations Research	3	1	-	-	4	-
25MG201022	Business Environment	3	-	-	-	3	-
25MG202001	Business Analytics For Managers	2	-	2	-	3	Management Information System

Program Elective (12- 18 Credits)

Course Code	Title of the Course	Lecture	Tutorial	Practical	Project based Learning	Credits	Pre-requisite
		L	T	P	S	C	
Finance Basket							
25MG201023	Investment Management	3	-	-	-	3	-
25MG201024	Capital Markets and Financial Services	3	-	-	-	3	Financial Management
25MG201025	Cost Accounting	3	-	-	-	3	-
25MG201026	Strategic Financial Management	3	-	-	-	3	Financial Accounting for Managers
25MG201027	Management of Banks	3	-	-	-	3	Financial Management
25MG201028	Corporate Restructuring	3	-	-	-	3	Insurance and Risk Management
25MG201029	Behavioral Finance	3	-	-	-	3	Financial Management
25MG202002	Financial Analytics	2	-	2	-	3	
25MG201030	Financial Planning and Wealth Management	3	-	-	-	3	-
25MG202003	Fintech	2	-	2	-	3	-
25MG201031	Artificial Intelligence for Finance	3	-	-	-	3	-
Human Resource Management Basket							
25MG201032	Industrial Relations and Labor Laws	3	-	-	-	3	-
25MG201033	Talent Management	3	-	-	-	3	-
25MG201034	Knowledge Management	3	-	-	-	3	-
25MG201035	Leadership and Team Building	3	-	-	-	3	-
25MG201036	Strategic Human Resource Management	3	-	-	-	3	Human Resource Management
25MG201037	Performance Management	3	-	-	-	3	-
25MG201038	Compensation Management	3	-	-	-	3	-
25MG201039	Learning and Development	3	-	-	-	3	-
25MG201040	International Human Resource Management	3	-	-	-	3	Human Resource Management

Course Code	Title of the Course	Lecture	Tutorial	Practical	Project based Learning	Credits	Pre-requisite
		L	T	P	S	C	
25MG201041	Organizational Development	3	-	-	-	3	-
25MG201042	Stress Management	3	-	-	-	3	-
25MG201043	Applications of AI in HRM	3	-	-	-	3	-
Marketing Basket							
25MG201044	Sales and Retail Management	3	-	-	-	3	-
25MG201045	Consumer Behaviour	3	-	-	-	3	-
25MG201046	Customer Relationship Marketing	3	-	-	-	3	-
25MG201047	Marketing of Services	3	-	-	-	3	-
25MG201048	Integrated Marketing Communication	3	-	-	-	3	-
25MG201049	Product and Brand Management	3	-	-	-	3	-
25MG201050	Rural Marketing	3	-	-	-	3	-
25MG201051	International Marketing	3	-	-	-	3	-
25MG201052	Green Marketing	3	-	-	-	3	-
25MG201053	Digital Marketing	3	-	-	-	3	-
25MG201054	Logistics and Supply Chain Management	3	-	-	-	3	-

Specialization Elective (18-24 Credits)

(BUSINESS ANALYTICS)

Course Code	Title of the Course	Lecture	Tutorial	Practical	Project based Learning	Credits	Pre-requisite
		L	T	P	S	C	
25MG201055	Business Forecasting	3	-	-	-	3	-
25MG202004	Predictive Analytics with Python	2	-	2	-	3	-
25MG202005	Data Mining and Machine Learning	2	-	2	-	3	-
25MG201056	Optimization Techniques	3	-	-	-	3	-
25MG202006	Advanced Excel for Business Analytics	2	-	2	-	3	-
25MG202007	Data Visualization Using Tableau	2	-	2	-	3	-
25MG202008	Business Intelligence with Power BI	2	-	2	-	3	-
25MG203001	Supply Chain Analytics	2	-	-	4	3	-
25MG201057	Statistics for Analytics	3	-	-	-	3	-
25MG202010	Data Analytics using Cloud Technology	2	-	2	-	3	-
25MG202011	Data Analysis with R	2	-	2	-	3	-

University Elective (3-9 Credits)

Course Code	Title of the Course	Lecture	Tutorial	Practical	Project based Learning	Credits	Pre-requisite
		L	T	P	S	C	
25AI201701	Business Analytics	3	-	-	-	3	
25AI201702	Ethics for AI	3	-	-	-	3	
25CM201701	Cost Management of Engineering Projects	3	-	-	-	3	
25CE201701	Disaster Management	3	-	-	-	3	
25SS201701	Value Education	3	-	-	-	3	
25SS201702	Pedagogy Studies	3	-	-	-	3	
25LG201701	Personality Development through Essential Life Skills	3	-	-	-	3	
25MG201701	Entrepreneurship and Innovation Management	3	-	-	-	3	

Note:

1. If any student has chosen a course or equivalent course from the above list in their regular curriculum then, he/she is not eligible to opt the same course/s under University Elective.
2. The student can choose courses from other disciplines offered across the schools of MBU satisfying the pre-requisite other than the above list.

SCHOOL CORE

Course Code	Course Title	L	T	P	S	C
25MG201001	BUSINESS STATISTICS	3	-	-	-	3
Pre-Requisite	-					
Anti-Requisite	-					
Co-Requisite	-					

COURSE DESCRIPTION: Organizations are surrounded with numerical data and information. All of us in day-to-day routine use numbers in our calculations. Problems in business contain a great degree of quantitative element in the form of facts and figures. It is essential for managers to carry out data analysis and interpretation for effective decisions. This course provides a detailed discussion on statistics, data, Measures of central tendency and dispersion. The concept of probability is explained. The student acquires knowledge related to time series and sampling process and skills in statistics for solving business problems.

COURSE OUTCOMES: After successful completion of the course, students will be able to:

- CO1.** Understand the applications of statistics in business and analyze the data.
- CO2.** Analyze and solve causal relation business problems by applying statistical techniques
- CO3.** Apply the concept of probability distributions to solve business problems.
- CO4.** Predict business trends using time series techniques and formulation of policies using index numbers
- CO5.** Analyse the hypothesis by applying statistical testing methods

CO-PO Mapping Table:

Course Outcomes	Program Outcomes						
	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	2	2	-	1	-	1	-
CO2	-	2	-	1	-	1	1
CO3	1	1	-	-	-	-	-
CO4	1	-	-	-	-	-	-
CO5	2	-	-	-	-	1	-
Course Correlation Mapping	2	2	-	1	-	1	1

Correlation Levels: **3: High;** **2: Medium;** **1: Low**

COURSE CONTENT

Module 1: INTRODUCTION TO STATISTICS (08 Periods)

Meaning, Application of Statistics in Business and Limitations of Statistics. Data – Data Sources, Data Classification, and Data Presentation (Tables and Graphs). Measures of Central Tendency, Measures of Dispersion

Module 2: CORRELATION AND REGRESSION ANALYSIS (08 Periods)

Correlation Analysis

Introduction, types of correlation, Methods of Correlation analysis, Scatter diagram method, Karl Pearson's correlation coefficient, Coefficient of determination, Spearman's rank correlation coefficient.

Regression Analysis

Introduction, Types of regression models, Significance of Regression Analysis, Methods of finding Regression Equations, Least Squares and Using Regression Coefficient methods, Prediction using the Regression Equations.

Module 3: PROBABILITY (09 Periods)

Probability

Basics of Probability, Probability Rules, Additive Rule, Multiplication Rule, Marginal Probability, Joint Probability, and Bayes' Theorem

Probability Distribution

Discrete Probability Distribution, Random Variable, Expected Values, Variance, Binomial Distribution, Poisson Distribution, Continuous Probability Distribution, Normal Distribution

Module 4: INDEX NUMBERS AND TIME SERIES (10 Periods)

Index numbers

Introduction, Characteristics and Uses of index numbers, Types of Index Numbers, Laspeyre, Paasche's, Fisher's, Marshall-Edgeworth, Dorbish and Bowley, Limitations of index numbers.

Time series analysis

Introduction, Components of a time series – Secular trend, Short term, Random or Irregular variations, Measurement of trend – Freehand method, Method of linear Curve fitting by the principle of least squares, Method of Semi-Averages and Moving average.

Module 5: SAMPLING (10 Periods)

Basics of sampling–Random and Non-Random sampling methods – sample size determination; Test of significance for small and large samples (t-test, Z-test, Chi-square test) - One-way and Two-way ANOVA.

Total Periods:45

EXPERIENTIAL LEARNING

LIST OF EXCERIES:

1. Prepare a brief report of any company's secondary data analyzed and interpreted.
2. Use Excel and do the analysis of any type of data of your choice.
3. Refer to any specific tutorial on how to do add-in "data analysis" and submit a report with screenshots of it
4. Above all will be detailed in CHO.

RESOURCES

TEXT BOOKS:

1. Gupta, S. P., & Gupta, M. P. (2023). "Business statistics" (20th ed.). Sultan Chand & Sons.
2. Beri, G. C. (2019). "Business statistics" (4th ed.). McGraw Hill Education.

REFERENCE BOOKS:

1. Levin, R. I., & Rubin, D. S. (2017). "Statistics for management" (8th ed.). Pearson Education.
2. Whigham, D. (2017). "Business data analysis using Excel" (2nd ed.). Oxford University Press.

VIDEO LECTURES:

1. <https://archive.nptel.ac.in/courses/110/107/110107114/>
2. https://onlinecourses.nptel.ac.in/noc21_ma01/preview

WEB RESOURCES:

1. <https://sites.google.com/site/fundamentalstatistics>
2. <http://www.textbooksfree.org/Statistics%20Book%20pdf.pdf>
3. <https://online.stat.psu.edu/statprogram/reviews/statistical-concepts>

SCHOOL CORE

Course Code	Course Title	L	T	P	S	C
25MG201002	ECONOMICS FOR MANAGERS	3	-	-	-	3
Pre-Requisite	-					
Anti-Requisite	-					
Co-Requisite	-					

COURSE DESCRIPTION: The course provides an introduction to a core area of economics known as microeconomics. It considers the operation of a market economy and the problem of how best to allocate society's scarce resources. The course considers the way in which various decision-making units in the economy (individuals and firms) make their consumption and production decisions and how these decisions are coordinated.

COURSE OUTCOMES: After successful completion of the course, students will be able to:

- CO1.** Understand the principles of Managerial Economics
- CO2.** Estimate the demand and supply in business
- CO3.** Estimate the production and its cost
- CO4.** Analyse the Market Structure and Pricing practices to solve business problems
- CO5.** Understand the impact of macro economics on business

CO-PO Mapping Table:

Course Outcomes	Program Outcomes						
	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	2	1	-	2	-	1	-
CO2	1	-	-	2	-	2	-
CO3	1	1	-	2	-	1	-
CO4	3	2	-	-	1	2	2
CO5	1	-	-	1	-	-	-
Course Correlation Mapping	3	2	-	2	1	2	2

Correlation Levels: **3: High;** **2: Medium;** **1: Low**

COURSE CONTENT

Module 1: INTRODUCTION TO MANAGERIAL ECONOMICS (09 Periods)

Definition, Nature and Scope - Relationship with other areas in Economics, Production Management, Marketing, Finance and Personnel, Operations research - The role of managerial economist. Scarcity and choice, Central problems of an economy, Production possibility curve and economic efficiency, a Positive and normative economics.

Module 2: DEMAND ANALYSIS (09 Periods)

Demand Function - Law of Demand - Elasticity of demand, types and significance of Elasticity of Demand - Demand Estimation - Demand Forecasting, significance - methods - Supply Analysis - Supply function, the Law of Supply, Elasticity of Supply.

Module 3: PRODUCTION ANALYSIS (09 Periods)

Production Function - Marginal Rate of Technical Substitution - Iso - quants and Iso- costs - Production function with one/two variables, Cobb-Douglas Production Function - Returns to Scale and Returns to Factors, Economies of scale-Cost theory and estimation: Cost concept and types, Determinants of cost, Cost-Output Function: short run and long run - Break Even Analysis.

Module 4: MARKET STRUCTURE AND PRICING PRACTICES (10 Periods)

Features and Types of different competitive situations - Price-Output determination in Perfect competition, Monopoly, Monopolistic competition and Oligopoly both the long run and short run - Pricing philosophy - Pricing methods in practice - Price discrimination - Product line pricing - Pricing strategies, skimming pricing, penetration pricing, Loss Leader pricing - Pricing of multiple products.

Module 5: MACRO-ECONOMIC REFORMS (08 Periods)

National Income, concept and measurement methods - Inflation, definition, characteristics and types of inflation- Effects of inflation- Anti- Inflationary methods- Business Cycles - Definition, Characteristics and phases of business cycle, New Economic Policies

Total Periods:45

EXPERIENTIAL LEARNING

LIST OF EXPERIMENTS:

1. Students in the form of a team should select any company and study the micro and macro-economic conditions.
2. Budget 2022 | Nirmala Sitharaman Presents Union Budget 2022 - YouTube. Refer the link in which you can get a budget presentation of the Finance ministry 2022 and prepare a key note on it.
3. Collect the required data that can be used for constructing the price and demand relationship and present it to the class.
4. List out the top 10 economies in the world along with federal banks' key rates.

RESOURCES

TEXT BOOKS:

- 1 Vengedasalam, D., & Madhavan, K. (2021). "Principles of economics" (2nd ed.). Oxford University Press.
- 1 Salvatore, D. (2020). "Principles of microeconomics" (7th ed.). Oxford University Press.
2. Dwivedi, D. N. (2019). "Microeconomics: Theory and applications" (4th ed.). Vikas Publishing.

REFERENCE BOOKS:

- 1 Dholakia, R. H., & Oza, A. N. (2018). "Microeconomics for management students" (2nd ed.). Oxford University Press.
2. Samuelson, W. F., & Marks, S. G. (2019). "Managerial economics" (9th ed.). Wiley.

VIDEO LECTURES:

1. <https://nptel.ac.in/courses/110101005>
2. <https://nptel.ac.in/courses/110105067>

WEB RESOURCES:

- 1 [https://mrcet.com/downloads/MBA/Managerial Economics.pdf](https://mrcet.com/downloads/MBA/Managerial%20Economics.pdf)
2. Business Economics Online Course | HBS Online

SCHOOL CORE

Course Code	Course Title	L	T	P	S	C
25MG201003	MANAGEMENT AND ORGANISATIONAL BEHAVIOUR	3	-	-	-	3
Pre-Requisite	-					
Anti-Requisite	-					
Co-Requisite	-					

COURSE DESCRIPTION: The course aims at providing fundamental knowledge and exposure to the concepts, theories, and practices in the field of management. It focuses on the basic roles, skills, and functions of management, with special attention to managerial responsibility for the effective and efficient achievement of goals. The course aims to provide an understanding of basic concepts, theories, and techniques in the field of human behaviour at the individual, group and organizational levels in the changing global scenario.

COURSE OUTCOMES: After successful completion of the course, students will be able to:

- CO1.** Understand the Management concepts and functions.
- CO2.** Execute personality traits in different business situations.
- CO3.** Analyze and evaluate teams, group dynamics, and conflicts.
- CO4.** Understand and analyze the organisation culture, managing change, right structure, and effective communication.
- CO5.** Evaluate interventions, interpersonal styles, and stress levels.

CO-PO Mapping Table:

Course Outcomes	Program Outcomes						
	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	2	1	-	3	-	-	-
CO2	-	-	2	1	-	-	-
CO3	-	2	1	2	2	1	-
CO4	-	-	-	2	-	2	1
CO5	1	1	-	-	-	-	2
Course Correlation Mapping	2	2	2	3	2	2	2

Correlation Levels: **3: High;** **2: Medium;** **1: Low**

COURSE CONTENT

Module 1: INTRODUCTION TO MANAGEMENT

(09 Periods)

Introduction to Management – Principles of Management – Functions of management – Decision-making process - Social responsibility of Management – Fundamentals of Planning, Organizing, Staffing, Leading, and Controlling.

Module 2: INTRODUCTION TO ORGANISATION BEHAVIOUR

(09 Periods)

Learning – Personality Theories– Perception – Learning Process, and Theories – Values & Attitudes.

Module 3: MOTIVATION THEORIES

(09 Periods)

Motivation Theories – Managing Motivation in Small and large organizations – Effective Groups & Teams – Leadership Theories, Styles – Group Dynamics – Power, Politics, and Conflict – Resolving Conflicts.

Module 4: ORGANIZATION CULTURE & CLIMATE

(09 Periods)

– Organizational Ethos – Functionality of Culture – Process and implementation of Change
– Managing Resistance to Change - Organization Structure and Communication

Module 5: ORGANIZATIONAL DEVELOPMENT

(09 Periods)

Organizational Development – Phases and Interventions of OD – Johari Window – Transactional Analysis- Managerial Interpersonal Styles - Managing Stress & Burnout – Organizational effectiveness – Benchmarking- TQM and Six Sigma

Total Periods:45

EXPERIENTIAL LEARNING

LIST OF EXPERIMENTS:

1. You are newly appointed as the manager of a failing team. Plan your first week. What management functions (planning, organizing, leading, controlling) will you prioritize, and why?
2. Imagine your university is expanding to open a new campus. How would you design the structure to manage academic and administrative functions?

RESOURCES

TEXT BOOKS:

1. DuBrin, A. J. (2022). "Essentials of management" (11th ed.). Cengage Learning.
2. Robbins, S. P., Coulter, M., & DeCenzo, D. A. (2021). "Fundamentals of management" (11th ed.). Pearson.

REFERENCE BOOKS:

1. Weihrich, H., Cannice, M. V., & Koontz, H. (2020). "Management: A global, innovative, and entrepreneurial perspective" (15th ed.). McGraw Hill.
2. Robbins, S. P., & Judge, T. A. (2022). "Organizational behavior" (19th ed.). Pearson.

VIDEO LECTURES:

1. <https://nptel.ac.in/courses/110105003>
2. <https://nptel.ac.in/courses/110105035>

WEB RESOURCES:

1. <https://www.forbes.com/sites/forbesbusinesscouncil/2021/05/03/what-21st-century-management-looks-like>
2. <https://www.bloomberg.com/professional/blog/four-core-principles-for-mastering-lean-data-management>

SCHOOL CORE

Course Code	Course Title	L	T	P	S	C
25MG201004	ENTREPRENEURSHIP AND NEW BUSINESS MODELS	3	-	-	-	3
Pre-Requisite	-					
Anti-Requisite	-					
Co-Requisite	-					

COURSE DESCRIPTION: This course enable students to understand the concept of entrepreneurship and skill sets of an entrepreneur, historical and theoretical perspective of entrepreneurship, recognition and shaping of various opportunities for new business. And develops a credible business plan for real life situations.

COURSE OUTCOMES: On having completed this course student should be able to:

- CO1.** Understand the concept of entrepreneurship
- CO2.** know entrepreneurship systems in real-time problems
- CO3.** Apply different techniques for product analysis.
- CO4.** Interpret the production of entrepreneurship data for identifying target customers
- CO5.** Design contemporary issues in entrepreneurship in the present scenario.

CO-PO Mapping Table:

Course Outcomes	Program Outcomes						
	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	2	-	-	2	-	-	-
CO2	1	1	-	2	-	-	-
CO3	3	-	-	-	-	-	-
CO4	-	-	-	-	2	-	2
CO5	3	-	-	-	-	-	-
Course Correlation Mapping	3	1	-	2	2	--	2

Correlation Levels: **3: High;** **2: Medium;** **1: Low**

COURSE CONTENT

Module 1: INTRODUCTION TO ENTREPRENEURSHIP **(08 Periods)**

Course Introduction, Profile of the Entrepreneur, Entrepreneurship in Established Firms Entrepreneurship in Established Firms, Venture Creation's Role in Society, Types of Enterprises, Technology Entrepreneurship, Impact Entrepreneurship

Module 2: OPPORTUNITY ANALYSIS **(09 Periods)**

Opportunities and Uncertainty, Push and Pull, and the Sources of Innovation, Customers as Sources of Opportunities, Importance of the Idea (VIDE Model), Assessing Opportunities, The Tournament Approach

Module 3 MARKETS, NEED-FINDING AND PLANNING **(10 Periods)**

Defining the Focal Market, Understanding User Needs, Competitive Analysis, Generating Ideas with Individuals and Groups, Planning: Assumptions, Planning: Discovery Driven Planning, Planning: Discovery Driven Planning Worksheet

Module 4 PITCHING, TESTING, AND PROTOTYPING **(09 Periods)**

Pitch, Testing your idea: Customer Interviews, Testing your Idea: Surveys, Creating a Prototype: Physical Goods, Creating a Prototype: Software, Creating a Prototype: Services, Summary and What's Ahead

Module 5 BUSINESS MODELS AND KEEPING CUSTOMERS **(09 Periods)**

Introduction to Financing and Profitability, Business Models, Measuring and Managing CLV

Total Periods: 45

EXPERIENTIAL LEARNING

1. Submit a report on the top ten innovative business ideas and their brief success story.
2. Write a case summary of successful entrepreneurship and its orientation.
3. Give a seminar on criteria of writing a new business proposal report using PPT.

RESOURCES

TEXT BOOKS:

1. Hisrich, R. D., Peters, M. P., & Shepherd, D. A. (2020). Entrepreneurship (11th ed.). McGraw Hill Education.
2. Blank, S., & Dorf, B. (2020). The startup owner's manual: The step-by-step guide for building a great company (2nd ed.). Wiley.

REFERENCE BOOKS:

1. Osterwalder, A., Pigneur, Y., Smith, A., & Etiemble, F. (2020). The invincible company: How to constantly reinvent your organization with inspiration from the world's best business models. Wiley.
2. Ries, E. (2017). The lean startup: How today's entrepreneurs use continuous innovation to create radically successful businesses. Crown Business.
3. Kuratko, D. F., & Hodgetts, R. M. (2021). Entrepreneurship: Theory, process, and practice (11th ed.). Cengage Learning.

VIDEO LECTURES:

1. https://www.youtube.com/watch?v=_C2LlvX9s5w
2. <https://www.youtube.com/watch?v=tkGadEmSKZc>

WEB RESOURCES:

1. <https://mbaexamnotes.com/business-idea-notes/>
2. <https://www.businessmanagementideas.com/entrepreneurship/business-ideas-introduction-definitions-features-need-and-techniques/5213>

SCHOOL CORE

Course Code	COURSE TITLE	L	T	P	S	C
25MG201005	LEGAL ASPECTS OF BUSINESS	3	-	-	-	3
Pre-Requisite	-					
Anti-Requisite	-					
Co-Requisite	-					

COURSE DESCRIPTION: The course aims to provide fundamental legal knowledge and exposure to the statutory provisions and practices in the field of Business Laws. It focuses on the basic legal aspects of Business Laws, with special attention to Contract Acts, Negotiable Instruments Act, Sale of Goods Act, Partnership Act, Formation of Company, the role of Board of Directors, not only business apart from ESG, Consumer Protection Act, RTI, ethical practices for the effective and efficient achievement of business goals. The course aims to provide an understanding of basic commercial laws and their implications, which affect business decisions in the changing global scenario.

COURSE OUTCOMES: After successful completion of the course, students will be able to:

- CO1.** Analyze the Indian Contract Act. Understanding Negotiable instruments to deal in business.
- CO2.** Evaluate Sale of Goods Act and to know the Conditions and Warranties on sale of goods.
- CO3.** Elaborate rights and duties of agent and principal, to learn the formation of company.
- CO4.** Understand Environment, Social, Governance and redressal systems.
- CO5.** Explain the rights and duties of Directors, dissolution of a company. Evaluate the global issues with respect to business ethics and morals.

CO-PO Mapping Table:

Course Outcomes	Program Outcomes						
	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	3	-	-	3	-	1	-
CO2	3	-	-	-	-	1	-
CO3	3	-	-	1	-	-	1
CO4	3	-	-	1	-	-	-
CO5	3	-	-	1	-	1	-
Course Correlation Mapping	3	-	-	3	-	1	1

Correlation Levels: **3: High;** **2: Medium;** **1: Low**

COURSE CONTENT

Module 1: INTRODUCTION TO CONTRACT ACT AND NEGOTIABLE INSTRUMENTS ACT (09 Periods)

Contract Act: Offer and Acceptance, Consideration and Capacity of the Parties, Free Consent, Indemnity and Guarantee, The Negotiable Instruments Act: Definition, Types of Negotiable Instruments, Negotiation, Endorsement and Crossing of Cheque, Dishonor of Cheques, Parties to Negotiable Instruments

Module 2: INTRODUCTION TO THE SALE OF GOODS ACT AND THE PARTNERSHIP ACT (09 Periods)

Sale of Goods Act: Sale, and Agreement to Sale, Conditions and Warranties, Performance of Contract of Sale, Unpaid Seller and his Rights, Caveat Emptor, Partnership Act, and Limited Liability Act.

Module 3: INTRODUCTION TO COMPANIES ACT (09 Periods)

Concept of Company and its Characteristics. Formation of a company. Memorandum and Articles of Association. Board of Directors, Role, Functions. Arbitration

Module 4: INTRODUCTION TO CONSUMER PROTECTION ACT AND RTI (09 Periods)

ESG (Environment, Social, Governance) Consumer Protection Act, Consumer Councils, Redressals. Right to Information Act

Module 5: WINDING UP AND DISSOLUTION OF COMPANY (09 Periods)

Meeting of Directors and Shareholders. Winding up and Dissolution of a company. Ethics, and Morals, Ethical Practices

Total Periods:45

EXPERIENTIAL LEARNING

1. Collect various cases relating to contracts, Negotiable instruments, dishonor of cheques, sale of goods, disputes consumer protection acts, grievances redressal mechanism and learn insights from it.
2. Present Videos how board meeting are conducted, organize role plays for decision making in different contexts. Giving assignments to students to write observations on recent winding up and dissolutions of companies.
3. Collect various cases relating to contracts, Negotiable instruments, dishonor of cheques, sale of goods, disputes consumer protection acts, grievances redressal mechanism and learn insights from it.

RESOURCES

TEXT BOOKS:

1. Fields, C. K., & Fields, K. C. (2025). The legal environment of business. Cengage Learning.
2. Pignataro, M., Cahoy, D., & Magid, J. M. (2025). The legal and regulatory environment of business (19th ed.). McGraw-Hill Education.

REFERENCE BOOKS:

1. Ferrera, G. R., Alexander, M. M., Kirschner, C., & Wiggins, W. P. (2025). The legal and ethical environment of business: An integrated approach (4th ed.). Aspen Publishing.
2. Prenkert, J. D. (2024). Business law: The ethical, global, and digital environment. McGraw-Hill Education.
3. Nabi, M. K. (2025). Legal aspects of business: Text & cases (3rd ed.). Taxmann Publications.

VIDEO LECTURES:

1. Business Laws - Course (nptel.ac.in)
<https://www.youtube.com/watch?v=FmqYLM-c2s4>
2. Business Laws - Course (nptel.ac.in)
<https://www.youtube.com/watch?v=FmqYLM-c2s4>

WEB RESOURCES:

1. <https://www.bigcommerce.com/blog/online-business-laws/>
2. <https://restthecase.com/knowledge-bank/tips/go-to-legal-websites-for-research-in-india>
3. <https://www.icsi.edu/media/webmodules/publications/FinalCLStudy.pdf>

SCHOOL CORE

Course Code	Course Title	L	T	P	S	C
25MG201006	INFORMATION TECHNOLOGY FOR MANAGERIAL APPLICATIONS	3	-	-	-	3
Pre-Requisite	-					
Anti-Requisite	-					
Co-Requisite	-					

COURSE DESCRIPTION: This course provides knowledge of computer fundamentals and trains in the use of office automation tools, packages to facilitate modern office day-to-day management.

COURSE OUTCOMES: After successful completion of the course, students will be able to:

- CO1.** understand basic Computer terminology and different devices.
- CO2.** understand Computer memory system and various memory devices.
- CO3.** apply different office automation tools for Text and document Manipulation.
- CO4.** Interpret the data using visualization tools and functions in excel.
- CO5.** Design templets, and presentations using presentation and multimedia tools in MS power Point.

CO-PO Mapping Table:

Course Outcomes	Program Outcomes						
	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	-	-	-	1	-	-	-
CO2	-	-	-	1	-	-	-
CO3	2	-	-	-	-	-	-
CO4	-	-	-	1	-	1	-
CO5	2	-	-	-	-	-	1
Course Correlation Mapping	2	-	-	1	-	1	1

Correlation Levels: **3: High;** **2: Medium;** **1: Low**

COURSE CONTENT

Module 1: INTRODUCTION (07 Periods)

Basics of Computer and its Evolution, Data, Instruction and Information, Characteristics of Computers, Input output Devices, Function of Different Units of Computer, Classification of Computers. Computer Software: Types of Software, Compiler and Interpreter, Generations of languages. Types of computer networks

Module 2: COMPUTER HARDWARE (08 Periods)

Computer Memory: Primary Memory (ROM and it's type – PROM, EPROM, EEPROM, RAM) Secondary memory- SASD, DASD Concept, Magnetic Disks – Floppy Disks, Hard Disks, Magnetic Tape, Optical Disks – CD ROM and it's type (CD ROM, CD ROM-R, DVD ROM, Flash Memory, Introduction to Operating System (OS); Function of OS, Types of Operating Systems

Module 3: MS WORD (10 Periods)

Introduction to Microsoft Office – Common office tools and techniques, MS Word environment, working with word documents, working with text, working with tables, Language selection, Spelling and grammar check, adding graphics, Mail merge, Advanced features of MS Word, Applying bullets and numbering, Insertion of objects.

Module 4: EXCEL INTRODUCTION (10 Periods)

Introduction to MS Excel - Working with Excel workbook- working with worksheet – Calculating features – Formatting – Formulae & Functions – Using charts – Working with graphics – Creating pivot table – Goal seek – Solver- Macros

Module 5: POWER POINT (10 Periods)

Presenting with PowerPoint-Working with slides, Modifying & Customizing presentation, Inserting pictures, Tables, charts, viewing presentation – Menu & toolbars – Customizing menus and Tool bars.

Total Periods:45

EXPERIENTIAL LEARNING

LIST OF EXERCISES:

1. Demonstrate the advanced features of Excel by DIY.
2. Prepare a template of word document that can be used for report writing.
3. Prepare a Financial Statement and apply Finance functions by using excel
4. Prepare a template of word document that can be used for using charts
5. Prepare a template of MS Power point that can be used for presentations
6. Demonstrate the advanced features of excel that can be used for creating Pivot Table

RESOURCES

TEXT BOOKS:

1. Leon, A., & Leon, M. (2009). Fundamentals of information technology (2nd ed.). Vijay Nicole [formerly Vikas Publishing House].
2. Turban, E., Rainer, R. K., & Potter, R. E. (2022). Introduction to information technology (Latest ed.). John Wiley & Sons.

REFERENCE BOOKS:

1. Lucas, H. C., Jr. (1999). Information technology for management (7th ed.). McGraw-Hill Higher Education.
2. Haag, S., Cummings, M., & McCubbrey, D. J. (2019). Management information systems for the information age (10th ed.). McGraw-Hill Education.

VIDEO LECTURES:

1. <https://nptel.ac.in/courses/110105148>
2. https://www.youtube.com/watch?v=eEo_aacpwCw
3. <https://www.udemy.com/course/computer-fundamentals-k/>

WEB RESOURCES:

1. <https://smallbusiness.chron.com/information-technology-uses-business-management-3128.html>
2. Information Technology and E-Business- <https://backup.pondiuni.edu.in/>
3. COMPUTER FUNDAMENTALS: <https://nios.ac.in/media>
4. <https://backup.pondiuni.edu.in/>
5. <https://nios.ac.in/media/documents/sec315new/LM-Computer%20Fundamental.pdf>
6. <https://drive.google.com/file/d/1PxhuswtGn0h1v1Chuk-aXGC-hMfQLCL3/view>

SCHOOL CORE

Course Code	COURSE TITLE	L	T	P	S	C
25MG201007	INTERNATIONAL BUSINESS	3	-	-	-	3
Pre-Requisite	-					
Anti-Requisite	-					
Co-Requisite	-					

COURSE DESCRIPTION: This course will provide students with the knowledge, skills, and abilities to understand the global economic, political, cultural and social environment within which firms operate.

COURSE OUTCOMES: After successful completion of the course, students will be able to:

- CO1.** Manage ever changing businesses in a competitive globalized business environment and gain business acumen and entrepreneurial skills
- CO2.** Evaluate the effects of International Political, Legal, and economic4 Environments and economic integration on developed/developing/under developing countries
- CO3.** Deliberate international financial framework to engage business at international level.
- CO4.** Analyze the significance of marketing in global business arena
- CO5.** Analyze various HR differences and behavioral factors between countries for better strategies.

CO-PO Mapping Table:

Course Outcomes	Program Outcomes						
	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	2	-	-	-	-	-	-
CO2	-	-	-	2	-	-	1
CO3	-	-	-	2	-	-	-
CO4	-	-	-	2	-	1	-
CO5	-	-	-	2	-	-	1
Course Correlation Mapping	2	-	-	2	-	1	1

Correlation Levels: **3: High;** **2: Medium;** **1: Low**

COURSE CONTENT

Module 1: INTRODUCTION TO INTERNATIONAL BUSINESS (09 Periods)

Introduction to International Business Context-Brief History of International Trade-Reasons for Trade -Trade Theories-Motives for International Business-Methods of International Business. Global Trade-The Reasons for Trade-International Trade Theory-Reasons to Go International-Forms of International Business

Module 2: INTERNATIONAL POLITICAL, LEGAL, AND ECONOMIC ENVIRONMENTS (09 Periods)

Political Systems- Political and Legal Factors that Impact International Trade -Legal Systems- Rule of Law-International Economic Systems-Comparing Economic Performance-International Business Ethics-International Corporate Social Responsibility.

Module 3: INTERNATIONAL FINANCIAL FRAMEWORK (09 Periods)

Brief Overview of Bretton Woods Agreement, Balance of Trade and Balance of Payment (BOP)- Foreign Exchange market mechanism- Exchange Rates, Risk Management. Methods of payment in International Trade. Export Financing - International Liquidity, Role of IMF and IBRD in International Business.

Module 4: GLOBAL MARKETING (09 Periods)

International Marketing Overview-International Marketing-International Marketing Segmentation-International Marketing Strategies-International 4Ps Introduction-International 4P - Product-International 4P - Promotion-International Marketing Mix-International 4P - Price -International 4P - Place

Module 5: INTERNATIONAL HUMAN RESOURCE MANAGEMENT (09 Periods)

Strategies and issues in International Human Resource Management and Development, Staffing Policy, Managing the expatriates. Creation of Global Structure-Developing Global Competitiveness, International Marketing Strategies in different stages of Product Life Cycle

Total Periods: 45

EXPERIENTIAL LEARNING

LIST OF EXPERIMENTS:

1. Collect the case studies related to International Present them as a seminar.
2. Give a seminar on Strategies and issues in International Human Resource Management and Development.
3. Refer to any video lecture on Political, Social, and Economic - Cultural and Ethical practices in International Business and prepare a report.

RESOURCES

TEXT BOOKS:

1. Cavusgil, S. T., Knight, G., Riesenberger, J. R., & Yaprak, A. (2023). International business: The new realities (6th ed.). Pearson.
2. Hill, C. W. L., & Hult, G. T. M. (2022). International business: Competing in the global marketplace (13th ed.). McGraw-Hill Education.

REFERENCE BOOKS:

1. Daniels, J. D., Radebaugh, L. H., & Sullivan, D. P. (2022). International business: Environments and operations (17th ed.). Pearson.
2. Griffin, R. W., & Pustay, M. W. (2020). International business: A managerial perspective (9th ed.). Pearson.
3. Morrison, J. (2020). The global business environment: Towards sustainability? (5th ed.). Palgrave Macmillan.

VIDEO LECTURES:

1. <https://www.youtube.com/watch?v=F6Qx32U0Jz4>
2. <https://www.youtube.com/watch?v=I6rW6H9dhx8>

WEB RESOURCES:

1. <https://www.vedantu.com/revision-notes/cbse-class-11-business-studies-notes-chapter-11-international-business>
2. <http://www.sscasc.in/sscn/uploads/I%20M.Com%20%20IB.pdf>

SCHOOL CORE

Course Code	Course Title	L	T	P	S	C
25MG201008	MANAGEMENT INFORMATION SYSTEMS	3	-	-	-	3
Pre-Requisite	-					
Anti-Requisite	-					
Co-Requisite	-					

COURSE DESCRIPTION: This course provides an in-depth understanding of Information Systems (IS) and their strategic role in organizations. It explores the design, implementation, and management of computer-based systems that support business operations, decision-making, and innovation. Key topics include Foundations of Information Systems, Systems Development Life Cycle, Various methodologies of IS development, Information System for operations and decision making, Managing Information Technology and Managerial Issues in IS. Through case studies and hands-on projects, students will develop critical thinking and practical skills in using information systems to solve real-world business problems.

COURSE OUTCOMES: After successful completion of the course, students will be able to:

- CO1.** Assess the basic concepts and technologies used in the field of management information system.
- CO2.** Assess the role of information system in organizations, the strategic management processes and the implications for the management.
- CO3.** Design, implement and maintain, usable, reliable and cost-effective information systems that support operational, managerial and strategic activities of organizations
- CO4.** Coordinate with the user community in IS requirements analysis/design activities, and provide guidance and technical support to end user computing activities
- CO5.** assess the knowledge of contemporary issues related to the field of managing information systems

CO-PO Mapping Table:

Course Outcomes	Program Outcomes						
	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	-	-	-	1	-	1	-
CO2	-	-	-	1	-	-	-
CO3	-	2	-	-	-	-	1
CO4	-	-	-	-	-	-	1
CO5	1	-	-	1	-	-	-
Course Correlation Mapping	1	2	-	1	-	1	1

Correlation Levels: **3: High;** **2: Medium;** **1: Low**

COURSE CONTENT

Module 1: FOUNDATIONS OF INFORMATION SYSTEMS (08 Periods)

Foundations of Information Systems: A framework for business users - Roles of Information systems - System concepts - Organisation as a system - Components of Information Systems - IS Activities - Types of IS.

Module 2: SDLC AND VARIOUS METHODS (08 Periods)

Systems Development Life Cycle, Various methodologies of IS development, Agile and Continuous Delivery Models, Design and Implementation of Innovative Process models.

Module 3: INFORMATION SYSTEM FOR OPERATIONS AND DECISION MAKING (09 Periods)

IS for operations and decision making: Marketing IS, Manufacturing IS, Human Resource IS, Accounting IS and Financial IS - Transaction Processing Systems- Information Reporting System - Information for Strategic Advantage.

Module 4: MANAGING INFORMATION TECHNOLOGY (10 Periods)

Managing Information Technology: Managing Information Resources and technologies – IS architecture and management - Centralised, Decentralised and Distributed - EDI, Supply chain management & Global Information Technology Management. Security and Ethical Challenges: Security and Ethical Challenges: IS controls - facility control and procedural control - Risks to online operations - Ethics for IS professional - Societal challenges of Information technology.

Module 5: MANAGERIAL ISSUES IN IS (10 Periods)

Emerging issues in managing Information Systems in business like Systems Security, Technological obsolescence, Change Management, IT infrastructure Management, etc.

Total Periods:45

EXPERIENTIAL LEARNING

LIST OF EXCERIES:

1. Identify a real IS problem, perform a system analysis, and propose a technology-based solution.
2. Analyze and present solutions for real-world information system challenges faced by businesses, such as ERP implementation, cybersecurity breaches, or data migration.
3. Above all will be detailed in CHO.

RESOURCES

TEXT BOOKS:

1. Valacich, J. S., & Schneider, C. (2022). Information systems today: Managing the digital world (10th ed.). Pearson.
2. Laudon, K. C., & Laudon, J. P. (2022). Management information systems: Managing the digital firm (17th ed., Global ed.). Pearson.

REFERENCE BOOKS:

1. Stair, R., & Reynolds, G. (2021). Principles of information systems (14th ed.). Cengage Learning.
2. Baltzan, P., & Phillips, A. (2023). Business driven information systems (9th ed.). McGraw-Hill Education.
3. Haag, S., & Cummings, M. (2020). Management information systems for the information age (10th ed.). McGraw-Hill Education.

VIDEO LECTURES:

1. https://onlinecourses.nptel.ac.in/noc24_mg96/preview

WEB RESOURCES:

1. <https://www.gartner.com/en/information-technology>
2. <https://learn.microsoft.com/en-us/training/>

SCHOOL CORE

Course Code	Course Title	L	T	P	S	C
25MG201009	CAREER PLANNING AND DEVELOPMENT	3	-	-	-	3
Pre-Requisite	-					
Anti-Requisite	-					
Co-Requisite	-					

COURSE DESCRIPTION: This course aims to equip students with a comprehensive understanding of career planning and development processes. It focuses on self-assessment, identifying career choices, mastering job search essentials, and fostering long-term career growth and development. By integrating theories, models, and practical tools, the course prepares students to make informed career decisions, develop strategies for professional advancement, and adapt to evolving career landscapes.

COURSE OUTCOMES: After successful completion of the course, students will be able to:

- CO1.** Gain a structured approach to career planning and development, integrating theoretical frameworks with practical applications.
- CO2.** Develop personalized strategies for career choices based on self-assessment and a clear understanding of internal and external influencing factors.
- CO3.** Master job search techniques, including resume building and interview preparation, tailored to diverse professional scenarios.
- CO4.** Apply career development theories to create actionable plans for sustained career growth and adjust to challenges effectively.
- CO5.** Build strong professional networks, align career goals with personal values, and achieve holistic development by balancing work and life roles.

CO-PO Mapping Table:

Course Outcomes	Program Outcomes						
	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	3	-	-	-	-	-	-
CO2	-	-	2	-	-	-	-
CO3	-	-	-	-	-	-	1
CO4	2	-	-	-	-	-	-
CO5	-	-	-	-	-	-	1
Course Correlation Mapping	3	-	2	-	-	-	1

Correlation Levels: **3: High;** **2: Medium;** **1: Low**

COURSE CONTENT

Module 1: INTRODUCTION TO CAREER PLANNING AND DEVELOPMENT (09 Periods)

Meaning and Definition of Career Planning, Career Anchors, Personality typology, Factors Influencing Career Choices- Internal and External, Behavioural model

Module 2: SELF-ASSESSMENT AND CAREER CHOICE (09 Periods)

Self-Assessment- meaning and Its Role in Career Planning, SWOT Analysis for Career Development (Strengths, Weaknesses, Opportunities, Threats), Identifying Skills, Interests, and Values (Hard Skills and Soft Skills), Linking Personality Traits with Career Choices, Short-term and Long term Career Planning.

Module 3: JOB SEARCH ESSENTIALS (09 Periods)

Online Job Portals and Resources, Key Components of an Effective Resume, Preparing for Different Types of Interviews -Face-to-face, Telephonic, Virtual, Common Interview Questions and Techniques to answer them.

Module 4: NETWORKING IN CAREER ADVANCING (09 Periods)

The Role of Networking in Career Advancement; The interconnections between work, mental well-being, relationships, and other life roles

Module 5: CAREER GROWTH AND DEVELOPMENT (09 Periods)

Action Plans for Career Development: Steps to Take, Theories and models of career development, Evaluating Career Progress and Adjusting Goals

Total Periods:45

EXPERIENTIAL LEARNING

LIST OF EXPERIMENTS:

1. Collect the case relating to the planning of Career Development Skills
2. Present an animated Video about Career Growth and Development in the form of a PPT.

RESOURCES

TEXT BOOKS:

1. Reardon, R. C., Lenz, J. G., Peterson, G. W., & Sampson, J. P. (2021). Career development and planning: A comprehensive approach (6th ed.). Kendall Hunt Publishing.
2. Greenhaus, J. H., Callanan, G. A., & Godshalk, V. M. (2022). Career management (6th ed.). Sage Publications.

REFERENCE BOOKS:

1. Burnett, B., & Evans, D. J. (2021). Designing your work life: How to thrive and change and find happiness at work. Knopf.
2. Bolles, R. N. (2022). What color is your parachute? 2022: Your guide to a lifetime of meaningful work and career success. Ten Speed Press.
3. Hall, D. T., & Yip, J. (2021). Careers in and out of organizations (2nd ed.). Sage Publications.

VIDEO LECTURES:

1. <https://nptel.ac.in/courses/110105003>
2. <https://nptel.ac.in/courses/110105035>

WEB RESOURCES:

1. <https://www.gouconnect.com/candid-career-access/>
2. <https://www.linkedin.com/learning/>
3. <https://in.indeed.com/career-advice>

SCHOOL CORE

Course Code	Course Title	L	T	P	S	C
25MG201010	DATA ANALYSIS USING SPREADSHEETS	3	-	-	-	3
Pre-Requisite						
Anti-Requisite						
Co-Requisite						

COURSE DESCRIPTION: The objective of the course is to provide students the knowledge of analysis techniques for datasets in Excel. Become adept at using Excel functions and techniques for analysis.

COURSE OUTCOMES: After successful completion of the course, students will be able to:

- CO1.** Apply the basics of the spreadsheet software using Google Sheets.
- CO2.** Apply cell functions, features, and row options in spreadsheets
- CO3.** Develop and present various charts in spreadsheets-
- CO4.** Apply various spreadsheet tools and options
- CO5.** Analyse and develop spreadsheet pivot tables and charts

CO-PO Mapping Table:

Course Outcomes	Program Outcomes						
	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	2	-	-	-	-	-	-
CO2	1	-	-	-	-	-	-
CO3	-	-	-	-	-	-	1
CO4	1	-	-	-	-	-	-
CO5	-	1	-	-	-	1	-
Course Correlation Mapping	2	1	-	-	-	1	1

Correlation Levels: **3: High;** **2: Medium;** **1: Low**

COURSE CONTENT

Module 1: INTRODUCTION TO SUSTAINABLE DEVELOPMENT (09 Periods)

About Excel & Microsoft, Uses of Excel, Excel software, Spreadsheet window pane, Title Bar, Menu Bar, Standard Toolbar, Formatting Toolbar, the Ribbon, File Tab and Backstage View, Formula Bar, Workbook Window, Status Bar, Task Pane, Workbook & sheets88

Module 2: CELLS AND SHEETS (09 Periods)

Selecting Columns & Rows, Changing Column Width & Row Height, Autofitting Columns & Rows, Hiding/Unhiding Columns & Rows, Inserting & Deleting Columns & Rows, Cell, Address of a cell, Components of a cell – Format, value, formula, Use of paste and paste special

Module 3: SPREADSHEET CHARTS (09 Periods)

Creating Charts, Different types of charts, Formatting Chart Objects, Changing the Chart Type, Showing and Hiding the Legend, Showing and Hiding the Data Table

Module 4: SPREADSHEET TOOLS (09 Periods)

Moving between Spreadsheets, Selecting Multiple Spreadsheets, Inserting and Deleting Spreadsheets Renaming Spreadsheets, Splitting the Screen, Freezing Panes, Copying and Pasting Data between Spreadsheets, Hiding, Protecting worksheets

Module 5: SPREADSHEET PIVOT TABLES (09 Periods)

Creating PivotTables, manipulating a PivotTable, Using the PivotTable Toolbar, Changing Data Field, Properties, Displaying a PivotChart, Setting PivotTable Options, . Adding Subtotals to PivotTables

Total Periods:45

EXPERIENTIAL LEARNING

- 1 Create a Pivot table of sales data with regard to area and present the report.
- 2 Prepare a dashboard using charts and diagrams from the spreadsheet and discuss.
- 3 Briefly submit a video tutorial on spreadsheet recent features in the class and explain in detail the key points
- 4 Submit an assignment on how spreadsheets are used for business needs.

RESOURCES

TEXT BOOKS:

- 1 Winston, W. L. (2023). *Microsoft Excel data analysis and business modeling* (7th ed.). Microsoft Press.
- 2 Alexander, M., & Kusleika, D. (2022). *Excel 2021 Bible* (1st ed.). Wiley.

REFERENCE BOOKS:

- 1 Proctor, S. (2022). *Excel Power Pivot & Power Query for Dummies* (2nd ed.). Wiley.
- 2 Neufert, C. (2021). *Data analysis with Microsoft Excel: Updated for Office 365* (5th ed.). Routledge.
- 3 Kvanli, A. H., Pavur, R. J., & Keeling, K. B. (2021). *Introduction to business statistics with Microsoft Excel* (9th ed.). Cengage Learning.

VIDEO LECTURES:

- 1 https://onlinecourses.nptel.ac.in/noc22_mg35/preview
- 2 <https://archive.nptel.ac.in/courses/110/107/110107157/>

WEB RESOURCES:

- 1 <https://ncert.nic.in/textbook/pdf/leca102.pdf>
- 2 <https://www.epa.gov/sites/default/files/2015-06/documents/UsingExcelREV.pdf>

SCHOOL CORE

Course Code	Course Title	L	T	P	S	C
25MG207058	APTITUDE TRAINING	2	-	-	-	2
Pre-Requisite	-					
Anti-Requisite	-					
Co-Requisite	-					

COURSE DESCRIPTION:

This course is designed to make students acquainted with frequently asked questions in quantitative aptitude and logical reasoning during various examinations and campus interviews.

COURSE OUTCOMES: After successful completion of the course, students will be able to:

- CO1.** Understand the basic concepts of quantitative ability and solve questions based on Averages, Ages and Percentages.
- CO2.** Solve problems related to probability and applied mathematics.
- CO3.** Apply the concept of data interpretation to solve competitive examination questions.
- CO4.** Analyze and solve logical reasoning while preparing for an interview and competitive exams.

CO-PO Mapping Table:

Course Outcomes	Program Outcomes						
	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	2	-	-	-	-	-	-
CO2	1	-	-	-	-	-	-
CO3	-	-	-	-	-	-	1
CO4	1	-	-	-	-	-	-
Course Correlation Mapping	2	1	-	-	-	1	1

Correlation Levels: **3: High;** **2: Medium;** **1: Low**

COURSE CONTENT

Module 1: QUANTITATIVE ABILITY (BASIC MATHEMATICS) (07 Periods)

Number Systems, LCM and HCF, Simplification, Average, Problems on Ages, Percentages.

Module 2: QUANTITATIVE ABILITY (APPLIED MATHEMATICS) (07 Periods)

Permutation and Combinations, Probability, Profit and Loss, Simple and Compound Interest, Time, Speed and Distance.

Module 3: DATA INTERPRETATION (08 Periods)

Data Interpretation, Tables, Column Graphs, Bar Graphs, Line Charts, Pie Chart, Venn Diagrams.

Module 4: LOGICAL REASONING (08 Periods)

Analogy, Blood Relation, Directional Sense, Number and Letter Series, Coding – Decoding, Clocks, Seating Arrangement.

Total Periods: 30

EXPERIENTIAL LEARNING

LIST OF EXERCISES:

1. Identify members from five groups (ex. family). Find the number of males and females. Calculate the average age (income) of male and female members in each group and overall average age. Do a comparative study.
2. Identify any five small businesses (ex. shop). Find out the cost price and selling price of any five products. What is the percent of profit(loss) on each product and all the products.
3. Identify any five states in India. Gather information about literacy rate, employment, GDP etc. important socio-economic variables. Use Tables, graphs and diagram, prepare a report.

RESOURCES

TEXT BOOKS:

1. Agarwal, R. S. (2022). Quantitative aptitude (40th ed.). S. Chand Publishing.
2. Varma, R. (2021). Fast track objective arithmetic (3rd rev. ed.). Arihant Publications.

REFERENCE BOOKS:

1. Barrett, J., & Barrett, T. (2023). Ultimate aptitude tests: Over 1,000 practice questions for abstract visual, numerical, verbal, physical, spatial and systems tests. *Kogan Page*.
2. Sharma, A. (2020). Quantitative aptitude for CAT (4th ed.). Tata McGraw-Hill Education.
3. Saraf, S., & Swarup, A. (2022). Quantitative aptitude and reasoning. *Pearson India*.

VIDEO LECTURES:

1. <https://www.youtube.com/watch?v=ZuMJFleXmiw>
2. <https://www.youtube.com/watch?v=JGNkZ6QLSU8>

WEB RESOURCES:

1. ICAI - The Institute of Chartered Accountants of India
2. Aptitude Questions and Answers - IndiaBIX

SCHOOL CORE
(MANDATORY COURSE)

Course Code	Course Title	L	T	P	S	C
22LG207601	TECHNICAL REPORT WRITING	2	-	-	-	2
Pre-Requisite	-					
Anti-Requisite	-					
Co-Requisite	-					

COURSE DESCRIPTION: This course deals with preparing effective technical documents for both written and digital media, with particular emphasis on technical memos, problem-solving and decision-making reports, and organizational, product-support, and technical-information webs.

COURSE OUTCOMES: After successful completion of the course, students will be able to:

- CO1.** Demonstrate knowledge of Technical Report Writing and structures with a scientific attitude.
- CO2.** Analyze the process of writing in preparing effective reports.
- CO3.** Demonstrate styles of writing for Publication in a Scientific Journal.
- CO4.** Apply the process of referencing and editing techniques for effective communication in written documents.
- CO5.** Analyze the strategies in the technical report presentation.

CO-PO Mapping Table:

Course Outcomes	Program Outcomes						
	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	2	-	-	-	-	-	-
CO2	1	-	-	-	-	-	-
CO3	-	-	-	-	-	-	1
CO4	1	-	-	-	-	-	-
CO5	-	1	-	-	-	1	-
Course Correlation Mapping	2	1	-	-	-	1	1

Correlation Levels: **3: High;** **2: Medium;** **1: Low**

COURSE CONTENT

Module 1 INTRODUCTION TO TECHNICAL REPORT (06 Periods)

Concepts of Technical Report, Types of Reports, Planning Technical Report Writing, Components of a Technical Report, Report Writing in Science and Technology, Selecting and Preparing a Title, Language Use in Report Writing.

Module2 PROCESSOF WRITING (06 Periods)

Writing the 'Introduction', Writing the 'Materials and Methods', Writing the Findings/Results, Writing the 'Discussion', Preparing and using "Tables".

Module3 STYLE OF WRITING (06 Periods)

Preparing and using Effective 'Graphs', Citing and Arranging References-I, Citing and Arranging References -II, Writing for Publication in a Scientific Journal.

Module4 REFERENCING (06 Periods)

Literature citations, Introductory remarks on literature citations, Reasons for literature citations, Bibliographical data according to ISO standards, Citations in the text, Copyright, and copyright laws, the text of the Technical Report, Using a word processing and desktop publishing (DTP) systems, Document or page layout, hints on editing Typographic details, Cross-references.

Module5 PRESENTATION (06 Periods)

Presentation with appropriate pointing, Dealing with intermediate questions, Review and analysis of the presentation, Rhetoric tips from A to Z.

Total Periods: 30

EXPERIENTIAL LEARNING

1. Prepare a report on technologies of modern times that enriched the originality of research works and their impacts on society concerning plagiarism.
2. Make PowerPoint presentations on the various style of writing academic reports.
3. Error-free Reports are so important for successful communication and sharing of information. Prepare a detailed chart on proofreading techniques to make a report effective and error-free.
4. Design a logo for a company and write down the copy-right laws for that.
5. Read research articles from any international journal of science and technology and differentiate research writing from other academic and non-academic writings.
6. Write an organizational memo Include a heading, introduction, and summary at the beginning of your memo, and present the details of your discussion in a logical order. Use headings and topic or main-idea sentences to clarify the organization.
7. Prepare an appraisal report on the staff performance of your company.
8. Prepare a PowerPoint presentation on the annual performance report of a company.
9. Critically review and write a report on any one of the recently released products.
10. Read the newspaper and write a detailed report about the content coverage and analyse the factors for the popularity of the newspaper.

RESOURCES

TEXTBOOK

1. Sharma, R. C., & Mohan, K. (2017). Business correspondence and report writing (4th ed.). McGraw Hill Education.
2. Forsyth, P. (2019). How to write reports and proposals (5th ed.). Kogan Page.

REFERENCE BOOKS:

1. Seely, J. (2013). The Oxford guide to writing and speaking (Indian ed.). Oxford University Press.
2. Eisenberg, A. (2013). A beginner's guide to technical communication. McGraw-Hill Education (India).
3. Day, R. A., & Sakaduski, N. (2011). Scientific English: A guide for scientists and other professionals (3rd ed.). Greenwood.

VIDEO LECTURES:

1. Innovative Teaching in a Technical Report Writing Classroom (IICLL2015) on Vimeo
2. 002. The Anatomy of a Technical Report - The University of Sheffield Kaltura Digital Media Hub

WEB RESOURCES:

1. <http://www.aresearchguide.com/writing-a-technical-report.htm>

SCHOOL CORE

Course Code	Course Title	L	T	P	S	C
25MG207602	ESSENTIALS OF BUSINESS ETIQUETTE	2	-	-	-	2
Pre-Requisite	-					
Anti-Requisite	-					
Co-Requisite	-					

COURSE DESCRIPTION: This course develops the concept of business etiquette and the proper etiquette practices for different business scenarios. It builds student awareness of professional conduct and cultural sensitivity, preparing them to navigate diverse global environments with confidence, respect, and appropriate etiquette for every scenario.

COURSE OUTCOMES: After successful completion of the course, students will be able to:

- CO1.** To understand the concept of Etiquette.
- CO2.** Develop life skills or etiquette in order to succeed in corporate culture.
- CO3.** Present oneself with finesse and making others comfortable in a business
- CO4.** Adopt behaviors consistent with standard workplace expectations
- CO5.** Demonstrate an understanding of professionalism in terms of workplace behaviors and place relationships.

CO-PO Mapping Table:

Course Outcomes	Program Outcomes						
	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	2	-	-	-	-	-	-
CO2	1	-	-	-	-	-	-
CO3	-	-	-	-	-	-	1
CO4	1	-	-	-	-	-	-
CO5	-	1	-	-	-	1	-
Course Correlation Mapping	2	1	-	-	-	1	1

Correlation Levels: **3: High;** **2: Medium;** **1: Low**

COURSE CONTENT

Module 1: INTRODUCTION TO ETIQUETTE

(06 Periods)

Introduction to etiquette, benefits- Business etiquette – ABCs of etiquette- Manners, poor manners and good manners- - Role of good manners in business –Professional conduct and personal spacing.

Module 2: CLASSIFICATION OF ETIQUETTE

(06 Periods)

Telephone Etiquette - Email etiquette - Dining Etiquette - Dress Etiquette, - Online chat etiquette - Virtual Etiquette - Work place Etiquette

Module 3: MULTI-CULTURAL ETIQUETTE

(06 Periods)

Inclusivity and Diversity - cultural awareness –cultural sensitivity - Adaptability and Flexibility - Inter-cultural communication - Ethical Considerations -Taboos and practices

Module 4: WORKPLACE COURTESY AND BUSINESS ETHICS

(06 Periods)

Workplace Courtesy - Business Ethics - Hierarchy and Protocol - Developing good relations with peers, superiors, subordinates - Offering compliments and criticism- Preventing Sexual Harassment - Conflict Resolution Strategies

Module 5: NEW ISSUES IN ETIQUETTE & WORKPLACE SUCCESS

(06 Periods)

Ethical Issues in Business Etiquette - Cultural Differences and their Effects on Business Etiquette - Sexual Etiquette in the Workplace - Preventing Sexual Harassment- Professionalism - Interpersonal relations- Following Company Policy for Business Etiquette

Total Periods: 30

EXPERIENTIAL LEARNING

- 1 Role play activity in Telephone etiquette practices.
- 2 As a new employee, how do you follow workplace courtesies?
- 3 Group presentation of Etiquette in different countries.
- 4 Imagine you are a supervisor and explain your subordinates the importance of business etiquette.
- 5 You came to know that one of male employees in your company sexually harassed a female employee. As a boss of a company, how do you handle the situation and suggest steps to prevent sexual harassment at work place.

RESOURCES

TEXTBOOK:

1. Pachter, B. (2013). *The essentials of business etiquette: How to greet, eat, and tweet your way to success*. McGraw-Hill Education.
2. Meier, J. D., & Morris, J. (2014). *The etiquette edge: The unspoken rules for business success*. AMACOM.

REFERENCE BOOKS:

1. Hickson, M., Stacks, D. W., & Moore, N. (2016). *Business and professional*
2. Rosenthal, P. (2017). *The polished professional: The essential business etiquette handbook*. Independently Published.
3. Stewart, M. (2020). *The new rules of business etiquette: Modern manners for a successful career*. Kogan Page.

VIDEO LECTURES:

1. <https://in.video.search.yahoo.com/yhs/search?fr=yhs-sz-002&ei=UTF-8&hsimp=yhs-002&hspart=sz¶m1=2723087361&p=cultural+awareness+%E2%80%93cultural+sensitivity+video&type=type80160-2362144563#id=8&vid=11d76fd8f4c9b5419344ccfd30f291c1&action=click>
2. <https://in.video.search.yahoo.com/yhs/search?fr=yhs-sz-002&ei=UTF-8&hsimp=yhs-002&hspart=sz¶m1=2723087361&p=cultural+awareness+%E2%80%93cultural+sensitivity+video&type=type80160-2362144563#id=9&vid=ea7c85dbd21b03e8dec303c23c6bcb7b&action=view>

WEB RESOURCES:

1. <https://theengine.biz/wp-content/uploads/2020/12/Business-Etiquette-ebook.pdf>
2. <https://insights.si/wp-content/uploads/hunt-chaney-l.-i-st.-clair-martin-j.-2007.-the-essential-guide-to-business-etiquette.pdf>
3. <https://www.scribd.com/document/732526337/Types-of-Business-Etiquette-and-its-Importance>

SCHOOL CORE

Course Code	Course Title	L	T	P	S	C
25CB207601	ESSENTIALS OF CYBER SECURITY	2	-	-	-	2
Pre-Requisite	-					
Anti-Requisite	-					
Co-Requisite	-					

COURSE DESCRIPTION: This course provides a detailed discussion on Cyber Security Fundamentals, Cyber Security Fundamentals, Attacker techniques and motivations, Fraud techniques, Threat infrastructure, Exploitation, Malicious code, Defense and analysis techniques, Intrusion detection techniques

COURSE OUTCOMES: After successful completion of the course, students will be able to:

- CO1.** Understanding the fundamental concepts of cyber security concepts
- CO2.** Identify the pattern of launching attacker and fraud techniques to reduce risk and impact of cyber-attacks.
- CO3.** Identify the vulnerabilities using the SQL injection and web exploitation techniques in a system for securing data.
- CO4.** Apply code obfuscation techniques to prevent any unauthorized party from accessing logic of an application
- CO5.** Apply honey pots and malicious code-naming techniques to defend against attacks in memory.

CO-PO Mapping Table:

Course Outcomes	Program Outcomes						
	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	2	-	-	-	-	-	-
CO2	1	-	-	-	-	-	-
CO3	-	-	-	-	-	-	1
CO4	1	-	-	-	-	-	-
CO5	-	1	-	-	-	1	-
Course Correlation Mapping	2	1	-	-	-	1	1

Correlation Levels: **3: High;** **2: Medium;** **1: Low**

COURSE CONTENT

Module 1: CYBER SECURITY FUNDAMENTALS

(05 Periods)

Network Security Concepts: Information assurance fundamentals, Basic cryptography, Symmetric encryption, Public key encryption, The Domain Name System (DNS), Firewalls, Virtualization, Radio-Frequency Identification.

Module 2: ATTACKER TECHNIQUES

(07 Periods)

Attacker techniques and motivations: Anti forensics, proxy usage, Tunneling techniques: HTTP, DNS, ICMP, Intermediaries, Steganography and other concepts, Detection and prevention.

Fraud techniques: Phishing, smishing, vishing and mobile malicious code, rogue antivirus, click fraud.

Threat infrastructure: Botnets, Fast Flux, Advanced Fast Flux.

Module 3: EXPLOITATION

(06 Periods)

Shellcode, Integer overflow vulnerabilities, Stack based buffer overflows, Format string vulnerabilities, SQL injection, Malicious PDF files, Race conditions, Web exploit tools, DoS conditions, Brute force and dictionary attacks.

Module 4: MALICIOUS CODE

(06 Periods)

Worms, viruses, Evading detection and elevating privileges: obfuscation, Virtual Machine obfuscation Persistent software techniques, Token kidnapping, Virtual machine Detection, Rootkits, Spyware, Attacks against privileged user accounts and escalation of privileges, Stealing information and Exploitation.

Module 5: DEFENSE AND ANALYSIS TECHNIQUES

(06 Periods)

Importance of memory forensics, Capabilities of memory forensics, Memory analysis frameworks, Dumping physical memory, Installing and using volatility, Finding hidden processes, Volatility analyst pack.

Honeypots, Malicious code naming, Automated malicious code analysis systems, Intrusion detection techniques

Total Periods:30

EXPERIENTIAL LEARNING

1. Observe the firewall settings on your personal computer or smartphone.
 - What configurations are enabled?
 - How does this firewall protect your device from threats?
2. Compare phishing, smishing, and vishing using real-life examples. Which of these do you think people are most vulnerable to, and why?
3. Research a recent DoS attack in the news.
 - What services were affected?
 - What preventive measures could have reduced the impact?
4. Explore your antivirus software logs.
 - What types of threats were blocked recently?
 - Were any of them worms, viruses, or spyware?
5. Reflect on the importance of intrusion detection systems (IDS).
 - How does an IDS differ from a firewall?
 - Why are both needed in an organization's security framework?

RESOURCES

TEXT BOOKS:

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

REFERENCE BOOKS:

1. Andress, J. (2020). *Foundations of information security: A straightforward introduction* (2nd ed.). No Starch Press.
2. Ciampa, M. (2022). *CompTIA Security+ guide to network security fundamentals* (7th ed.). Cengage Learning.
3. Whitman, M. E., & Mattord, H. J. (2022). *Principles of information security* (7th ed.). Cengage Learning.

VIDEO LECTURES:

1. <https://nptel.ac.in/courses/106106129>
2. <https://www.coursera.org/professional-certificates/ibm-cybersecurity-analyst>

WEB RESOURCES:

1. <https://www.interpol.int/en/Crimes/Cybercrime>
2. <https://www.geeksforgeeks.org/ethical-hacking/cyber-security-tutorial/>
3. <https://owasp.org/www-project-top-ten/>
4. <https://www.netacad.com/courses/cybersecurity-essentials?courseLang=en-US>

PROGRAM CORE

Course Code	Course Title	L	T	P	S	C
25MG201011	Risk Management and Insurance	3	-	-	-	3
Pre-Requisite	-					
Anti-Requisite	-					
Co-Requisite	-					

COURSE DESCRIPTION: This course offers a foundational understanding of financial services in India, covering banking, insurance, and regulatory institutions. It explores financial instruments, emerging trends like FinTech and ESG, and the role of financial services in economic development. Students will gain insights into risk management, credit systems, and digital innovations in the sector.

COURSE OUTCOMES:

- CO1.** Explain the nature, scope, and classification of financial services and evaluate their role in the economic development of India.
- CO2.** Analyze the structure and reforms in the Indian banking system, including risk management practices, Basel norms, and financial inclusion initiatives
- CO3.** Demonstrate an understanding of insurance principles, risk management, and the regulatory framework governing the insurance sector in India.
- CO4.** Examine various financial instruments and services such as mutual funds, leasing, factoring, venture capital, and credit rating mechanisms.
- CO5.** Evaluate the impact of digital innovations, cybersecurity, ESG principles, and investor protection in modern financial and insurance services.

CO-PO Mapping Table:

Course Outcomes	Program Outcomes						
	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	3	-	-	-	1	-	-
CO2	3	-	-	-	1	-	-
CO3	3	-	2	-	2	-	-
CO4	3	1	2	-	2	-	-
CO5	3	-	2	-	2	-	-
Course Correlation Mapping	3	1	2	-	2	-	-

Correlation Levels: **3: High;** **2: Medium;** **1: Low**

COURSE CONTENT

Module 1: INTRODUCTION TO FINANCIAL SERVICES (08 Periods)

Meaning, nature, and scope of financial services, Classification: Fund-based and fee-based services, Growth and structure of financial services in India, Regulatory institutions: RBI, SEBI, IRDAI – roles and functions, Role of financial services in economic development

Module 2: INDIAN BANKING SYSTEM AND REFORMS (10 Periods)

Structure of the Indian banking sector: Public, private, RRBs, cooperative banks, Banking sector reforms post-liberalization (1991 onwards), Credit creation, deposit mobilization, NPA management, Risk management practices in banks, Basel norms (overview of I, II, III, IV), Financial inclusion and priority sector lending

Module 3: INSURANCE AND RISK MANAGEMENT (09 Periods)

Meaning and principles of insurance, Classification: Life and non-life insurance, Microinsurance, health insurance, reinsurance, Risk identification, assessment, and management, IRDAI – structure, regulations, and recent initiatives, Bancassurance models and distribution channels

Module 4: FINANCIAL INSTRUMENTS AND SERVICES (09 Periods)

Mutual funds: types, structure, and NAV, Venture capital and private equity, Leasing and hire purchase – features and evaluation, Factoring and forfaiting, Credit rating: Process and agencies (CRISIL, ICRA, CARE, Fitch), Housing finance and securitization

Module 5: EMERGING TRENDS IN FINANCIAL AND INSURANCE SERVICES (09 Periods)

Digital banking: NEFT, RTGS, IMPS, UPI, AEPS, FinTech, Insurtech, and RegTech – innovations and challenges, Cybersecurity and data privacy in banking and insurance, ESG and sustainability in financial services, financial literacy and investor protection frameworks

Total Periods:45

Experiential Learning

Students will participate in:

1. Banking simulations and mock branch operations
2. Insurance claim processing case studies
3. Visits to financial institutions and regulatory bodies
4. Real-time data analysis of financial services platforms

RESOURCES

TEXT BOOKS:

1. Rejda, G. E., & McNamara, M. J. (2021). *Principles of risk management and insurance* (14th ed.). Pearson.
2. Harrington, S. E., & Niehaus, G. R. (2015). *Risk management and insurance* (2nd ed.). McGraw-Hill Education.

REFERENCE BOOKS:

1. Redja, G. E. (2020). *Foundations of risk management and insurance*. Pearson.
2. Trieschmann, J. S., Hoyt, R. E., & Sommer, D. W. (2019). *Risk management and insurance* (13th ed.). Cengage Learning.
3. Skipper, H. D., & Kwon, W. J. (2017). *Risk management and insurance: Perspectives in a global economy* (2nd ed.). Wiley-Blackwell.

VIDEO LECTURES:

1. <https://nptel.ac.in/courses/110/105/110105121>
2. https://swayam.gov.in/nd1_noc24_co34/preview
3. <https://irdai.gov.in/insurance-education>

WEB RESOURCES:

1. Reserve Bank of India. (2024). Annual report 2023-24. <https://www.rbi.org.in>
2. Insurance Regulatory and Development Authority of India. (2024). IRDAI annual report 2023-24. <https://www.irdai.gov.in>
3. Securities and Exchange Board of India. (2023). SEBI handbook of statistics. <https://www.sebi.gov.in>
4. National Payments Corporation of India. (2024). UPI, IMPS & AEPS – Annual performance reports. <https://www.npci.org.in>
5. NITI Aayog. (2021). India's booming FinTech sector: Towards a digital economy. <https://www.niti.gov.in>

PROGRAM CORE

Course Code	Course Title	L	T	P	S	C
25MG201012	DESIGN THINKING	3	-	-	-	3
Pre-Requisite						
Anti-Requisite						
Co-Requisite						

COURSE DESCRIPTION: The objective of the course is to inculcate the fundamental concepts of design thinking, imparting creativity and problem-solving ability, and conceptualize, design and demonstrate innovative ideas using prototypes

COURSE OUTCOMES: After successful completion of the course, students will be able to:

- CO1.** Understand the importance of design thinking
- CO2.** Demonstrate the critical theories of design, systems thinking, and design methodologies
- CO3.** Produce great designs, and communicate with high emotional and intellectual impact
- CO4.** Understand the diverse methods employed in design thinking and establish a workable design thinking framework to use in their practices
- CO5.** Develop projects in interdisciplinary domain and address social concerns with innovative approaches

CO-PO Mapping Table:

Course Outcomes	Program Outcomes						
	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	2	1	1	1	-	1	-
CO2	1	-	2	1	1	1	-
CO3	1	2	1	1	1	1	1
CO4	2	1	1	1	1	2	1
CO5	1	1	1	1	1	1	1
Course Correlation Mapping	1	1	1	1	1	1	1

Correlation Levels: **3: High;** **2: Medium;** **1: Low**

COURSE CONTENT

Module 1: INTRODUCTION	(09 Periods)
Traditional design, Design thinking, Existing sample design projects, Study on designs around us, Compositions/structure of a design,	
Module 2: DESIGN PROCESS	(09 Periods)
Innovative design: Breaking of patterns, Reframe existing design problems, Principles of creativity Empathy: Customer Needs, Insight-leaving from the lives of others/standing on the shoes of others, Observation	
Module 3: DESIGN TEAM	(09 Periods)
Team formation, Conceptualization: Visual thinking, Drawing/sketching, New concept thinking, Patents and Intellectual Property, Concept Generation Methodologies, Concept Selection, Concept Testing	
Module 4: PROTOTYPING	(09 Periods)
Opportunity identification Prototyping: Principles of prototyping, Prototyping technologies, Prototype using simple things, Wooden model, Clay model, 3D printing; Experimenting/testing.	
Module 5: PRODUCT DESIGN	(09 Periods)
sustainable product design, Ergonomics, Semantics, Entrepreneurship/business ideas, Product Data Specification, Establishing target specifications, Setting the final specifications. Design projects for teams	

Total Periods:45

EXPERIENTIAL LEARNING

- 1 Discuss any new product with regard to the design thinking process that has been recently introduced
- 2 Collect a case study on design thinking's importance and present it in the class.
- 3 Present a video presentation where design thinking is animated and explain the key points in the video.
- 4 Propose a new prototype of an old product whichever you feel needs an improvement in the product.

RESOURCES

TEXT BOOKS:

- 1 Brown, T. (2019). Change by design: How design thinking creates new alternatives for business and society (rev. & updated ed.). Harper Business.
- 2 Liedtka, J., & Ogilvie, T. (2011). Designing for growth: A design thinking tool kit for managers. Columbia University Press.

REFERENCE BOOKS:

- 1 Kelley, T., & Kelley, D. (2013). Creative confidence: Unleashing the creative potential within us all. Crown Business.
- 2 Martin, R. (2009). The design of business: Why design thinking is the next competitive advantage. Harvard Business Review Press.
- 3 Lewrick, M., Link, P., & Leifer, L. (2020). The design thinking playbook: Mindful digital transformation of teams, products, services, businesses and ecosystems. Wiley.

VIDEO LECTURES:

- 1 https://onlinecourses.nptel.ac.in/noc22_mg32/preview
2. <https://nptel.ac.in/courses/110106124>

WEB RESOURCES:

1. <https://web.stanford.edu/~mshanks/MichaelShanks/files/509554.pdf>
2. <https://readings.design/PDF/Tim%20Brown,%20Design%20Thinking.pdf>

PROGRAM CORE

Course Code	Course Title	L	T	P	S	C
25MG201013	SUSTAINABLE BUSINESS MANAGEMENT	3	-	-	-	3
Pre-Requisite	-					
Anti-Requisite	-					
Co-Requisite	-					

COURSE DESCRIPTION: This course is an introduction to all of the Sustainable Business Management: Global sustainable models, trade, industry, consumption, trends, strategies, key sectors, policy and more.

COURSE OUTCOMES: After successful completion of the course, students will be able to:

- CO1.** Understand the introduction to broad areas of sustainable business
- CO2.** Identify the sustainable business concepts.
- CO3.** Analyse concepts and techniques of planning, policy and sustainable governance.
- CO4.** Understand the international policies and regulations on sustainability.
- CO5.** Analyse the Sustainable Development Goals in detail.

CO-PO Mapping Table:

Course Outcomes	Program Outcomes						
	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	2	1	2	1	-	-	-
CO2	1	1	2	2	-	-	2
CO3	2	2	1	2	1	1	-
CO4	3	1	2	2	1	-	-
CO5	2	2	1	2	1	1	-
Course Correlation Mapping	2	2	2	2	1	1	2

Correlation Levels: **3: High;** **2: Medium;** **1: Low**

COURSE CONTENT

Module 1: SUSTAINABLE BUSINESS MANAGEMENT (09 Periods)

Definition, Concepts, Business, Environmental and Human Development o Rationale and Benefits of Sustainable Business o Global Business Models,

Module 2: SUSTAINABLE BUSINESS CONCEPTS (09 Periods)

Natural Capital and Publics Goods o Environmental Externalities o Sustainable Business Trends, Trade, Industry, Jobs, Consumption.

Module 3: PLANNING, POLICY AND SUSTAINABLE GOVERNANCE (10 Periods)

Sustainable Business Strategies o Key Sectors o Policy Assessment o Stakeholders Engagement o Policy and Regulatory Tools.

Module 4: INTERNATIONAL POLICIES (09 Periods)

International Policy Developments, Global Development Framework, Paris Agreement, The Kyoto Protocol, The new urban agenda

Module 5: SUSTAINABLE DEVELOPMENT GOALS (08 Periods)

No Poverty, Zero Hunger, Good Health and Well-being, Quality Education, Gender Equality, Clean Water and Sanitation, Affordable and Clean Energy, Decent Work and Economic Growth, Industry, Innovation, and Infrastructure, Reduced Inequality, Sustainable Cities and Communities, Responsible Consumption and Production, Climate Action, Life Below Water, Life on Land, Peace, Justice, and Strong Institutions, Partnerships for the Goals

Total Periods:45

EXPERIENTIAL LEARNING

1. Group discussions are conducted on Sustainable Development Goals and performance can be evaluated.
2. Business Project proposal has to be presented on the Sustainability Concept.
3. Collect any case study on sustainable business management and present its summary with key learnings.

RESOURCES

TEXT BOOKS:

1. Doppelt, B. (2017). Leading change toward sustainability: A change-management guide for business, government and civil society (2nd ed.). Routledge.
2. DesJardins, J. (2020). Business, ethics, and sustainability (3rd ed.). Routledge.

REFERENCE BOOKS:

1. Hart, S. L. (2017). Capitalism at the crossroads: Next generation business strategies for a post-crisis world (3rd ed.). Wharton School Publishing.
2. Benn, S., Edwards, M., & Williams, T. (2014). Organizational change for corporate sustainability (3rd ed.). Routledge.
3. Laszlo, C., & Zhexembayeva, N. (2017). Embedded sustainability: The next big competitive advantage. Routledge.

VIDEO LECTURES:

1. <http://acl.digimat.in/nptel/courses/video/110101153/L04.html>
2. <http://nitttrc.edu.in/nptel/courses/video/110101153/L07.html>

WEB RESOURCES:

1. https://efmdglobal.org/wp-content/uploads/Sustainable_Business_EN_Book-2018.pdf
2. https://www.iisd.org/system/files/publications/business_strategy.pdf

PROGRAM CORE						
Course Code	Course Title			L	T	P
25MG201014	STRATEGIC MANAGEMENT			3	-	-

Pre-Requisite

Anti-Requisite

Co-Requisite

COURSE DESCRIPTION: Strategic management is a comprehensive and dynamic field that focuses on the formulation, implementation, and evaluation of strategies to help organizations achieve their long-term objectives and gain a sustainable competitive advantage.

COURSE OUTCOMES: After successful completion of the course, students will be able to:

- CO1.** To understand the Strategic Management Process
- CO2.** To apply analytical tools for Strategic decision-making
- CO3.** To formulate effective Business strategies
- CO4.** To implement and align strategies within the organizations
- CO5.** To evaluate and adapt Strategies in dynamic environments

CO-PO Mapping Table:

Course Outcomes	Program Outcomes						
	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	3	1	3	-	1	2	-
CO2	-	3	-	-	3	2	-
CO3	1	3	3	2	2	2	-
CO4	-	-	1	-	-	2	2
CO5	1	1	-	1	2	-	2
Course Correlation Mapping	2	2	3	2	2	2	2

Correlation Levels: **3: High;** **2: Medium;** **1: Low**

COURSE CONTENT

Module 1: INTRODUCTION TO STRATEGIC MANAGEMENT	(09 Periods)
Introduction- Concepts in Strategic Management, Strategic Management as a process – Developing a strategic vision, Mission, Objectives, Policies – Factors that shape a company's strategy – Environmental Scanning -Concepts of Core Competence, Crafting a strategy for competitive advantage	
Module 2: STRATEGIC ANALYSIS AND CHOICE	(09 Periods)
Strategic Analysis and Choice: Tools and techniques- Porter's Five Force Model, BCG Matrix, GE Model, SWOT Analysis and TOWS Matrix, Market Life Cycle Model – and organisational Learning, and the Experience Curve	
Module 3 STRATEGY FORMULATION	(09 Periods)
Strategy Formulation: Formulation of strategy at corporate, business and functional levels. Strategy Alternatives: - Stability Strategy, Growth Strategy, Retrenchment Strategy, and Combination Strategy.	
Module 4 STRATEGY IMPLEMENTATION	(09 Periods)
Types of Strategies: Offensive strategy, Defensive strategy, vertical integration, horizontal strategy; Tailoring strategy to fit specific industry and company situations, Strategy and Leadership, Resource Allocation as a vital part of strategy – Planning systems for implementation	
Module 5 STRATEGY EVALUATION AND CONTROL	(09 Periods)
Establishing strategic controls - Role of the strategist - benchmarking to evaluate performance - strategic information systems – Guidelines for proper control- Strategic surveillance -strategic audit - Strategy and Corporate Evaluation and feedback in the Indian and international context	
Total Periods: 45	

EXPERIENTIAL LEARNING

1. Prepare a brief report of any company's secondary data analyzed and interpreted.
2. Prepare a case study analysis for class room presentation.

RESOURCES

TEXT BOOKS:

1. P. Subbarao, Strategic Management, Himalaya,2010
2. Azar Kazmi, Strategic Management and Business Policy, Tata McGraw-Hill Education, 2009.

REFERENCE BOOKS

1. V.S.P. Rao, Strategic Management – Text and Cases, Excel books,2009
2. Fred R. David, Strategic Management: A Competitive Approach, Concepts and Cases, Pearson, 16th edition,2019

VIDEO LECTURES:

1. <https://youtu.be/ZmRK9wc3hjI?si=uxWxM2TAyzNfGuJ>.
2. <https://youtu.be/d2GoZDOXzzw?si=-Ax6n42txJ7cFwwi>.
3. <https://youtu.be/8HZQvykaoW8?si=qNBzna6Oy88NO0mY>

WEB RESOURCES:

1. <https://study.sagepub.com/lynch9e>
2. <https://str.aom.org/teaching/all-levels>
3. <https://www.investopedia.com/terms/s/strategic-management.asp>

PROGRAM CORE

Course Code	Course Title	L	T	P	S	C
25MG201015	FINANCIAL ACCOUNTING FOR MANAGERS	3	-	-	-	3
Pre-Requisite	-					
Anti-Requisite	-					
Co-Requisite	-					

COURSE DESCRIPTION: The course focuses on a detailed understanding of the introduction of accounting, Generally Accepted Accounting Principles, Journal, Ledger, Trial Balance, and financial statements and their analysis.

COURSE OUTCOMES: After successful completion of the course, students will be able to:

- CO1.** Understand the accounting principles and the process of accounting such as recording, classification, summarization, and interpreting the transactions.
- CO2.** Analyze the Revenues and Expenses and prepare the financial statements.
- CO3.** Apply tools and techniques of financial analysis and judge the performance of the business.
- CO4.** Analyze the financial statements with the help of Funds Flow and Cash Flow Statements and interpretation of the financial results.
- CO5.** Understand the basics of computerized accounting system and be able to integrate the accounting with IT applications.

CO-PO Mapping Table:

Course Outcomes	Program Outcomes						
	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	3	-	-	1	-	-	-
CO2	3	-	1	1	-	1	-
CO3	3	1	-	1	1	1	1
CO4	3	1	-	1	1	1	-
CO5	3	-	1	-	1	-	-
Course Correlation Mapping	3	1	1	1	1	1	1

Correlation Levels: **3: High;** **2: Medium;** **1: Low**

COURSE CONTENT

Module 1: INTRODUCTION (10 Periods)

Accounting - Objectives of Accounting - Functions of Accounting - GAAP - Standards of Accounting - IFRS - Accounting Cycle - Double Entry System of Accounting - Accounting Equation - Preparation of Journal - Ledger - Trial Balance. (Theory and Cases)

Module 2: PREPARATION OF FINANCIAL STATEMENTS (10 Periods)

Financial Statements - Capital Receipts - Revenue Receipts - Capital Expenditure - Revenue Expenses - Final Accounts - Preparation of Final Accounts - Trading and Profit and Loss Account - Balance Sheet. Preparation of Final Accounts with Adjustments (Theory and Cases)

Module 3: RATIO ANALYSIS (10 Periods)

Classification of Ratios - Liquidity - Asset Management Ratios - Debt Management Ratio - Profitability Ratios - Market Value Ratios - Dupont Chart - Managerial uses and Limitations of Ratio Analysis (Theory and Cases).

Module 4: FUNDS FLOW & CASH FLOW ANALYSIS (10 Periods)

Objectives of Funds Flow Statement - Importance and Significance of Funds Flow Statement - Statement of Changes in Working Capital Position - Funds from Operations - Sources and Application of Funds. (Theory and Cases).

Cash Flow Statement - Objectives - Cash from Operating Activities - Cash from Investing Activities - Cash from Financing Activities - Distinction between Funds flow and Cash flow. (Theory and Cases)

Module 5: COMPUTERIZED ACCOUNTING SYSTEM (05 Periods)

Introduction - Comparison between Manual and Computerized Accounting - Advantages and Limitations of Computerized Accounting System - Accounting Software Packages - TALLY - ERP-9 - Workshop (Theory)

Total Periods:45

EXPERIENTIAL LEARNING

LIST OF EXPERIMENTS:

1. Students will be given an assignment saying that enter the business transactions in Tally ERP 9
2. Collect the information from the sole trader and prepare the final accounts. Present the summary as a group presentation
3. A group discussion will be conducted for the students about their observations between the company act 1956 and 2013
4. Above all will be detailed in CHO.

RESOURCES

TEXT BOOKS:

1. S.N. Maheswari: "Financial Accounting" (Vikas)
2. Jawaharlal: Accounting for Managers (Himalaya)
3. Mukharjee and Hanif (2013), Financial Accounting, New Delhi: Tata Mc-Graw Hill
4. P JAIN, K L NARANG ; Advanced Accountancy Principles of Accounting Vol-I.

REFERENCE BOOKS:

1. Paul, S. K. 4th ed New Central Book Agency Pvt. Ltd. Financial Accounting For Managers.
2. Ghosh, T. P. 4th ed Taxman Allied Service Financial Accounting.
3. Mohammed Hanif, Amitabh Mukherjee, (Fully solved problems, theory questions and exercises).

VIDEO LECTURES:

1. <http://www.digimat.in/nptel/courses/video/110106147/L01.html>
2. <https://www.digimat.in/nptel/courses/video/110101131/L25.html>

WEB RESOURCES:

1. https://rajeshhindukuristudyplace.webnode.com/_files/200000014-9621c971b8/ACCOUNTING%20FOR%20MANAGERS.pdf
2. https://ia800701.us.archive.org/28/items/Alan.J.Wein.Campbell.Walsh.Urology.11th.E.d.2016/9781485102786_Basic_Financial%20_Accounting.pdf

PROGRAM CORE

Course Code	Course Title	L	T	P	S	C
25MG201016	FINANCIAL MANAGEMENT	3	1	-	-	4
Pre-Requisite						
Anti-Requisite	-					
Co-Requisite	-					

COURSE DESCRIPTION: This course provides a detailed discussion on various sources of finances for corporate and utilization of funds for taking effective decisions related to capital structure, financing and investment in order to achieve maximum business growth.

COURSE OUTCOMES: After successful completion of the course, students will be able to:

- CO1.** Understand the different basic concepts of Corporate Finance and practical application of time value of money.
- CO2.** Understand the cost of capital; evaluate the weighted average cost of capital and the concept of leverage.
- CO3.** Develop required skills to select optimal capital structure on the basis of cost of capital.
- CO4.** Provide right investment decisions based on cost – benefit analysis.
- CO5.** Know the components of Working Capital and offer different models for firm's optimum dividend payout.

CO-PO Mapping Table:

Course Outcomes	Program Outcomes						
	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	3	-	-	-	-	-	-
CO2	3	3	-	2	3	-1	-
CO3	3	2	3	-2	-	-	-
CO4	3	3	3	-	3	-	-
CO5	3	2	3	2	3	-	-1
Course Correlation Mapping	3	3	3	2	3	1	1

Correlation Levels: **3: High;** **2: Medium;** **1: Low**

COURSE CONTENT

Module 1: INTRODUCTION	(05 Periods)
Financial Management – Nature and Scope – Profit Maximisation – Wealth Maximisation - Risk – Return – Trade off – Time Value of Money – Compounding Technique – Discounting Technique	
Module 2: FINANCIAL DECISION	(10 Periods)
Cost of Capital – Types of Cost of Capital – Cost of Debt – Cost of Preference Capital – Cost of Equity Capital – Cost of Retained Earnings – Weighted Average Cost of Capital. Leverage – Types of Leverage – Operating Leverage – Financial Leverage – Composite Leverage – Risk Factor. EBIT and EPS Analysis – Capital Structure - Factors determining Capital Structure – Theories of Capital Structure - Net Income Approach – Net Operating Income Approach – Traditional Approach – Modigliani and Miller Approach. (Theory and Case Studies)	
Module 3: INVESTMENT DECISION	(10 Periods)
Capital Budgeting – Nature and Importance – Techniques of Capital Budgeting – Traditional Methods – Payback Period – Accounting Rate of Return. Discounted Cash Flow Techniques – Net Present Value – Internal Rate of Return – Profitability Index (Theory and Case Studies)	
Module 4: WORKING CAPITAL DECISION	(10 Periods)
Components of Working Capital – Classification of Working Capital – Factors determining Working Capital Requirements – Cash Management – Cash budget – Receivables Management – Inventory Management – Techniques of Inventory Management. (Theory and Case Studies).	
Module 5: DIVIDEND DECISION	(10 Periods)
Factors Influencing Dividend Decision – Forms of Dividends – Dividend Decision and Valuation of Firm – Theories of Dividends - Walter - Gordon - MM Model – Linter's Model. (Theory and Case Studies)	

Total Periods:45

EXPERIENTIAL LEARNING

1. Take Nifty 50 companies and understand their capital structure.
2. Analyze the financial statements of BSE SENSEX- 30 companies

RESOURCES

TEXT BOOKS:

1. Pandey, I. M. (2015). *Financial management* (11th ed.). Vikas Publishing.
2. Brigham, E. F., & Ehrhardt, M. C. (2014). *Financial management: Theory and practice* (14th ed.). Cengage Learning.

REFERENCE BOOKS:

1. Van Horne, J. C., & Dhamija, S. (2011). *Financial management and policy* (12th ed.). Pearson Education.
2. Khan, M. Y., & Jain, P. K. (2014). *Financial management: Text, problems and cases* (7th ed.). McGraw-Hill.
3. Chandra, P. (2011). *Financial management: Theory and practice* (8th ed.). McGraw-Hill.

VIDEO LECTURES:

1. Mod-02 Lec-03 Basics of Financial Management - Part 1
2. https://www.youtube.com/watch?v=Sx-dy96_tCQ

WEB RESOURCES:

1. <https://mdu.ac.in/UpFiles/UpPdfFiles/2020/Jan/FinancialManagement.pdf>
2. <https://backup.pondiuni.edu.in/content/study-material-question-bank>

PROGRAM CORE

Course Code	Course Title	L	T	P	S	C
25MG201017	HUMAN RESOURCE MANAGEMENT	3	-	-	-	3
Pre-Requisite	-					
Anti-Requisite	-					
Co-Requisite	-					

COURSE DESCRIPTION: This course highlights the contemporary and key human resource management skills that are required by management professionals.

COURSE OUTCOMES: After successful completion of the course, students will be able to:

- CO1.** Understand HRM practices and apply them effectively in the real time business to increase productivity.
- CO2.** Apply job analysis, scientific recruitment and selection processes for higher productivity
- CO3.** Determine organizational growth by designing and implementing appropriate training and development programmes.
- CO4.** Demonstrate relevant performance appraisal and compensation systems to meet individual and organizational strategic needs
- CO5.** Analyze disciplinary and grievance mechanisms to ensure stability and smooth functioning of the organization

CO-PO Mapping Table:

Course Outcomes	Program Outcomes						
	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	3	3	3	-	1	-	-
CO2	3	3	3	1	-	-	-
CO3	3	3	-	2	-	-	-
CO4	2	3	3	-	-	-	-
CO5	1	2	2	1	1	-	-
Course Correlation Mapping	3	3	3	1	1	-	-

Correlation Levels: **3: High;** **2: Medium;** **1: Low**

COURSE CONTENT

Module 1: INTRODUCTION TO HRM **(09 Periods)**

Introduction to HRM: Definition – Functions – Personnel policies and principles; Human Resource Planning: Definition – Objectives – Process – Assessing Current Human Resources – Importance of HRP – Current Trends in HRM/HRP

Module 2: JOB ANALYSIS AND DESIGN **(09 Periods)**

Job Analysis and Design: Job Analysis – Process – Uses – Methods; Job Description – Job Specification; Job Design – Factors affecting job design – Different Approaches; Hack man & Oldham's Job Characteristics Model; Job Enlargement and Job Enrichment.

Recruitment and Selection: Recruitment – Process – Sources, advantages and disadvantages – e-Recruitment; Selection – Process – Barriers to effective selection.

Module 3: MANAGING CAREERS **(09 Periods)**

Managing Careers: Career Planning – Its Elements; Promotions – Transfers – Separations; Career Development – Initiatives – Employee commitment; **Training and Development:** Nature– Inputs – As a source of competitive advantage; Training process – Training Methods –Evaluation; Employee development – Methods.

Module 4: PERFORMANCE APPRAISAL AND COMPENSATION **(09 Periods)**

Performance Appraisal: Definition – Objectives – Process – Methods – Purposes; Job Evaluation – Methods; **Compensation Management:** Components of remuneration – Importance of an ideal compensation system – factors influencing employee remuneration; Concepts of Wages – Incentives – Types of incentive plans – Guidelines for Effective Incentive Plans; Employee Benefits – Need – Types.

Module 5: EMPLOYEE DISCIPLINE **(09 Periods)**

Employee Discipline: **Definition** – Causes of indiscipline – Kinds of punishments/penalties; Misconduct – Forms of misconduct – Procedure for Disciplinary Action– Principles of Maintaining Discipline; **Grievance Handling:** Causes of Grievance – Grievance procedure – Advantages; **Labour Laws:** Importance – sources – objectives; Ethical issues in HRM – HR Audit – Challenges of HRM

Total Periods:45

EXPERIENTIAL LEARNING

LIST OF EXPERIMENTS:

1. Collect the case studied related to recent trends in HRM and other Contemporary HR Practices and Present them as a seminar.
2. Different Case Studies Will be Given to students as per the topic that will be collected and evaluated.
3. The case studies will be collected as Assignments and the same will be evaluated.

RESOURCES

TEXT BOOKS:

1. Flippo, E. B. (2001). Personnel management. McGraw-Hill.
2. Dessler, G. (2007). Human resource management (11th ed.). PHI Learning.

REFERENCE BOOKS:

1. Subba Rao, P. (2010). *Personnel and human resource management: Text and cases* (4th ed.). Himalaya Publishing House.
2. Pattanayak, B. (2001). *Human resource management*. PHI Learning.
3. Aquinas, P. G. (2010). *Human resource management*. Vikas Publishing House.

VIDEO LECTURES:

1. <https://hbsp.harvard.edu/cases/>
2. <https://open.umn.edu/opentextbooks/textbooks/human-resource-management>

WEB RESOURCES:

1. <https://www.citehr.com/>
2. <https://www.hr-guide.com>
3. <https://www.icmrindia.org>

PROGRAM CORE

Course Code	Course Title	L	T	P	S	C
25MG201018	MARKETING MANAGEMENT	3	-	-	-	3
Pre-Requisite	-					
Anti-Requisite	-					
Co-Requisite	-					

COURSE DESCRIPTION: course prepares the student to become skilled in marketing areas, And pricing, promotional strategies for the effective implementation of marketing plan

COURSE OUTCOMES: On having completed this course student should be able to:

- CO1.** Appreciate the relevance of marketing management in the present scenario
- CO2.** Analyse marketing information systems in real-time problems.
- CO3.** Apply different Marketing techniques for product analysis.
- CO4.** Interpret the Marketing data for identifying target customers
- CO5.** Evaluate contemporary issues of marketing in the present scenario.

CO-PO Mapping Table:

Course Outcomes	Program Outcomes						
	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	3	3	3	-	-	-	-
CO2	3	3	3	1	-	1	-
CO3	3	3	-		-	-	2
CO4	2	3	3	2	1	-	-
CO5	2	2	1	-	-	-	2
Course Correlation Mapping	3	3	3	2	1	1	2

Correlation Levels: **3: High;** **2: Medium;** **1: Low**

Course Content

Module 1: INTRODUCTION TO MARKETING	(06 Periods)
Definition, importance and scope of Marketing - marketing orientation towards Marketing - Core Concepts of marketing - Marketing Management Tasks - Indian Marketing Environment: Demographic, Economic, Socio-Cultural, Politico-Legal and Technological Environment – Marketing and Customer Value - Corporate Strategic Planning – Marketing Research Process – Forecasting and Demand Measurement – Consumer Behavior – Market Segmentation – Market Targeting.	
Module 2: PRODUCT AND BRAND POSITIONING	(09 Periods)
Product strategy: - product concept – product characteristics and classification – differentiation – Product and brand relationships – packaging, labelling, warranties and guarantees.- product life cycle and marketing strategies- new product development process- branding- brand equity - trademark.- brand positioning- significance of marketing of services.	
Module 3 PRICING AND DISTRIBUTION.	(10 Periods)
Pricing strategy: - setting the price –adapting the price - initiating and responding to price changes. Distribution strategy: - designing and managing channels- managing retailing, wholesaling and logistics.	
Module 4 PROMOTIONAL AND MARKETING COMMUNICATION	(10 Periods)
Promotional strategy – designing and managing integrated marketing communications - managing mass communications and personal communications	
Module 5 MARKETING AUDIT AND NEWMARKET OFFERINGS.	(10 Periods)
Introducing New Market Offerings – Managing a holistic marketing organization – marketing implementation, evaluation and control- marketing audit.	

Total Periods: 45

EXPERIENTIAL LEARNING

1. Demonstrate the advanced features of Excel by DIY.
2. Prepare a template of a word document that can be used for report writing.
3. Give a seminar on new product marketing mix components of the e-commerce company of your choice.

RESOURCES

TEXT BOOKS:

1. Kotler, P., Keller, K. L., Koshy, A., & Jha, M. (2022). Marketing management: A South Asian perspective (16th ed.). Pearson.
2. Ramaswamy, V. S., & Namakumari, S. (2018). Marketing management: Indian context with global perspective (6th ed.). McGraw-Hill Education.

REFERENCE BOOKS:

1. Saxena, R. (2019). Marketing management (5th ed.). McGraw-Hill Education.
2. Etzel, M. J., Walker, B. J., & Stanton, W. J. (2017). Marketing (14th ed.). McGraw-Hill Education.
3. Baines, P., Fill, C., & Page, K. (2013). Essentials of marketing (2nd ed.). Oxford University Press.

VIDEO LECTURES:

1. <https://nptel.ac.in/courses/110105148>
2. Information Technology (IT) Management

WEB RESOURCES:

1. Information Technology & Its Uses in Business Management
2. Managerial Applications of Information Technology - 1623 Words | Bartleby

PROGRAM CORE

Course Code	Course Title	L	T	P	S	C
25MG201019	PRODUCTION AND OPERATIONS MANAGEMENT	3	-	-	-	3
Pre-Requisite	-					
Anti-Requisite	-					
Co-Requisite	-					

COURSE DESCRIPTION: This course is to integrate the various subjects studied by the students such as statistics, economics, finance, organizational behavior, and strategy into consolidated production and operations-related decisions and to understand techniques of location and facility planning; line balancing; job designing; and capacity planning etc.

COURSE OUTCOMES: After successful completion of the course, students will be able to:

- CO1.** Understand the concepts and functions of Production and Operations Management
- CO2.** Evaluate concepts of facilities location and maintenance in the production department
- CO3.** Analyse and evaluate Production Schedule for competitive Advantage
- CO4.** Explain the key terms, Methods, and techniques of inventory control in the field of Production practices in the organization.
- CO5.** Apply tools and techniques of Project Management

CO-PO Mapping Table:

Course Outcomes	Program Outcomes						
	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	2	1	2	1	1	-	-
CO2	1	1	2	2	-		2
CO3	2	2	1	2	1	-	-
CO4	3	1	2	2	1	-	-
CO5	2	2	1	2	1	1	-
Course Correlation Mapping	2	2	2	2	1	1	2

Correlation Levels: **3: High;** **2: Medium;** **1: Low**

COURSE CONTENT

Module 1: INTRODUCTION TO POM	(09 Periods)
Overview of Production and Operations Management (POM) Function, Role and Relevance of Production Management-Concept of Productivity-Production Systems-Work Study - Method Study and Work Measurement	
Module 2: FACILITIES LOCATION AND LAYOUT	(09 Periods)
Plant location-Plant Layout-Classification and merits. Plant Maintenance Methods-Breakdown, Preventive and Productive maintenance. Replacement Policies-Unit and Group Replacement policies	
Module 3: PRODUCTION PLANNING AND CONTROL	(10 Periods)
Process in PPC, Job Shop and Flow Shop Scheduling-Johnson's Rule-Line Balancing. Quality Control: Control Charts and Accepting Sampling	
Module 4: MATERIALS MANAGEMENT	(09 Periods)
Concepts-Classification of Inventory, Inventory Control Methods, Stores Management and Deterministic Inventory Models.	
Module 5: PROJECT MANAGEMENT	(08 Periods)
Concepts of project Management, CPM, PERT and Project Network Crashing and Cost Analysis, Applications of Network techniques.	
Total Periods:45	

EXPERIENTIAL LEARNING

LIST OF EXPERIMENTS:

1. Identify one company making a Product that is near to you and relate the topics of Unit 1 and Unit 2
2. Generate the idea of a new product and develop a prototype product
3. Collect any case study of operations related to any manufacturing company and present a summary report.

RESOURCES

TEXT BOOKS:

1. Chase, R. B., Jacobs, F. R., & Aquilano, N. J. (2006). Operations management for competitive advantage (11th ed.). McGraw-Hill.
2. Heizer, J., Render, B., & Munson, C. (2017). Operations management: Sustainability and supply chain management (12th ed.). Pearson Education.

REFERENCE BOOKS:

1. Stevenson, W. J. (2020). Operations management (14th ed.). McGraw-Hill Education.
2. Krajewski, L. J., Malhotra, M. K., & Ritzman, L. P. (2019). Operations management: Processes and supply chains (12th ed.). Pearson.
3. Mahadevan, B. (2015). Operations management: Theory and practice (3rd ed.). Pearson Education India.

VIDEO LECTURES:

1. <https://www.youtube.com/watch?v=DEuzzLled6k>
2. https://www.youtube.com/watch?v=CYoMGVJk_2s

WEB RESOURCES:

1. <https://mrcet.com/downloads/MBA/digitalnotes/Production%20and%20Operations%20Management.pdf>
2. <https://www.geektonight.com/production-and-operations-management-notes-pdf/>
3. <http://web.gjuonline.ac.in/distance/book/mba/MBA-204.pdf>

PROGRAM CORE

Course Code	Course Title	L	T	P	S	C
25MG201020	BUSINESS RESEARCH METHODOLOGY	3	-	-	-	3
Pre-Requisite	-					
Anti-Requisite	-					
Co-Requisite	-					

COURSE DESCRIPTION: This course focuses on the principles of the research proposal, literature evaluation, and qualitative and quantitative methods in order to offer the theoretical and practical foundation for a research project. The purpose of this course is to give students the knowledge and abilities needed to plan and carry out a research dissertation

COURSE OUTCOMES: After successful completion of the course, students will be able to:

- CO1.** understand the importance of research and the various methods that researcher used to investigate problems
- CO2.** Evaluate the different types of research designs to derive strategies
- CO3.** understand the concepts and challenges in collecting the data
- CO4.** Interpret the data to make meaningful decisions through analyzing the data
- CO5.** Know the report writing procedure

CO-PO Mapping Table:

Course Outcomes	Program Outcomes						
	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	2	1	2	1	-	-	-
CO2	1	1	2	2	1	-	2
CO3	2	2	1	2	1	-	-
CO4	3	1	2	2	1	-	-
CO5	2	2	1	2	1	1	-
Course Correlation Mapping	2	2	2	2	1	1	2

Correlation Levels: **3: High;** **2: Medium;** **1: Low**

COURSE CONTENT

Module 1: INTRODUCTION TO BUSINESS RESEARCH (09 Periods)

Definition-Types of Business Research, Scientific Investigation, Technology and Business Research: Information needs of Business - Role of Business Research in Managerial Decisions. Problem Identification: Broad Problem Area-Preliminary Data Gathering. Literature Survey

Module 2: RESEARCH DESIGN (09 Periods)

Types of Research Designs: Exploratory, Descriptive, Experimental Designs and Case Study - Measurement of Variables- Operational Definitions and Scales-Nominal and Ordinal Scales- Rating Scales- Ranking Scales- Reliability and Validity - Sampling and Methods of sampling

Module 3: DATA SOURCES AND SURVEY (10 Periods)

Primary and Secondary Sources of Data - Data Collection Methods Observational Surveys: Questionnaire Construction: Organizing Questions- Structured and Unstructured Questionnaires - Guidelines for Construction of Questionnaires.

Module 4: DATA ANALYSIS (09 Periods)

Hypothesis Development - Statement of Hypothesis- Procedure for Testing of Hypothesis, Cross Tabulation, Uni-variate analysis, bivariate analysis: Correlation, Karl Pearson's coefficient of correlation, Spearman 's coefficient of correlation, hypothesis testing, t-test, Z test, F-test, Chi-square test, Analysis of variance.

Module 5: RESEARCH REPORT (08 Periods)

Research Reports-Components-The Title Page-Table of Contents-The Executive Summary-The Introductory Section-The Body of the Report -The Final Part of the Report- Acknowledgements - References-Appendix - Guidelines for Preparing a Good Research report - Oral Presentation

Total Periods:45

EXPERIENTIAL LEARNING

1. Prepare a questionnaire on descriptive type research and collect the data.
2. Conduct a focus group discussion about higher education in India and submit a report
3. Give a presentation on primary and secondary sources of data if you are asked to collect data about Amazon India sales in a certain period of time.

RESOURCES

TEXT BOOKS:

1. Cooper, D. R., & Schindler, P. S. (2019). Business research methods (13th ed.). McGraw-Hill Education.
2. Zikmund, W. G., Babin, B. J., Carr, J. C., & Griffin, M. (2013). Business research methods (9th ed.). Cengage Learning.

REFERENCE BOOKS:

1. Sekaran, U., & Bougie, R. (2019). Research methods for business: A skill-building approach (8th ed.). Wiley.
2. Bryman, A., & Bell, E. (2015). Business research methods (4th ed.). Oxford University Press.
3. Easterby-Smith, M., Thorpe, R., & Jackson, P. (2018). Management and business research (6th ed.). SAGE Publications.

VIDEO LECTURES:

1. <https://www.youtube.com/watch?v=ZLjmuKwUfWk>
2. <https://www.youtube.com/watch?v=xfWxIkeH7Ic>

WEB RESOURCES:

1. <https://www.caluniv.ac.in/academic/Commerce/Study/S-IV-BRM.pdf>
2. <https://mu.ac.in/wp-content/uploads/2022/08/MMS-Business-Research-Methods.pdf>

PROGRAM CORE

Course Code	Course Title	L	T	P	S	C
25MG201021	OPERATIONS RESEARCH	3	1	-	-	4
Pre-Requisite	-					
Anti-Requisite	-					
Co-Requisite	-					

COURSE DESCRIPTION: To make the student capable of formulating various real-life decision-making problems as mathematical programming problems and also to learn fundamental techniques of operations research and to choose suitable OR techniques to solve problems on hand.

COURSE OUTCOMES: After successful completion of the course, students will be able to:

- CO1.** Create mathematical models of real-life problems using graphical and simplex methods
- CO2.** Apply special cases in LPP such as transportation techniques.
- CO3.** Apply special cases in LPP such as assignment techniques
- CO4.** Analyze the best strategy out of the available strategies using game theory techniques.
- CO5.** Solve any project in the form of a network and PERT modules.

CO-PO Mapping Table:

Course Outcomes	Program Outcomes						
	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	2	1	2	1	-	-	-
CO2	1	1	2	2	-	-	2
CO3	2	2	1	2	1	-	-
CO4	3	1	2	2	1	-	-
CO5	2	2	1	2	1	1	-
Course Correlation Mapping	2	2	2	2	1	1	2

Correlation Levels: **3: High;** **2: Medium;** **1: Low**

COURSE CONTENT

Module 1: LINEAR PROGRAMMING-I (09 Periods)

Classification of Models, Types of operation research models; Linear Programming-Problem formulation, Graphical Method, Simplex Method, Big-M Method, degeneracy, problems and cases.

Module 2: LINEAR PROGRAMMING-II (09 Periods)

Transportation problem-Mathematical formulation, different methods of obtaining Initial basic Feasible Solution- North-West Corner Method, Least Cost Method, VAM, test for optimality (MODI), Unbalanced Transportation Problem, Problems and cases

Module 3: LINEAR PROGRAMMING-III (09 Periods)

Assignment Problems-Introduction, Formulation, Hungarian Assignment Method, Degeneracy, Unbalanced Assignment problems, Maximisation Problem, Travelling Salesmen Problem, Problems and cases

Module 4: GAME THEORY (09 Periods)

Introduction, Minimax (Maximin) Criteria, Optimal Strategy, Saddle point, Pure strategy games, Games with mixed strategy, 2x2 games, rule of dominance, graphical method, problems and cases

Module 5: PROJECT MANAGEMENT (09 Periods)

Project Management, Network Construction, Critical Path Method, Probability of completing the project within the given time, Project Crashing, Problems and cases

Total Periods: 45

EXPERIENTIAL LEARNING

LIST OF EXPERIMENTS:

1. Use Excel to prepare the Gantt chart of any select project work of your choice and submit a report.
2. Prepare a case on how to apply game theory techniques and submit the case report.
3. Present a PPT on a brief introduction to freely available software for operation research problems.
4. Give a seminar on transportation and assignment problems in real-time scenario
5. Collect the case sheet of any business related to the operations research process and summarise the report.

RESOURCES

TEXT BOOKS:

1. Taha, H. A. (2017). *Operations research: An introduction* (10th ed.). Pearson.
2. Hillier, F. S., & Lieberman, G. J. (2021). *Introduction to operations research* (11th ed.). McGraw-Hill Education.

REFERENCE BOOKS:

1. Winston, W. L. (2004). *Operations research: Applications and algorithms* (4th ed.). Cengage Learning.
2. Kanti Swarup, Gupta, P. K., & Mohan, M. (2017). *Operations research* (15th ed.). Sultan Chand & Sons.
3. Ravindran, A. R. (2008). *Operations research: Principles and practice* (2nd ed.). Wiley.

VIDEO LECTURES:

1. <https://nptel.ac.in/courses/110106062>
2. Operations Research - Course

WEB RESOURCES:

1. 4_06-11-2021_16-06-34_OPERATIONS RESEARCH TECHNIQUES (20MAT22C5).pdf
2. [mrcet.com/downloads/digital notes/ME/IV year/Operations Research.pdf](http://mrcet.com/downloads/digital%20notes/ME/IV%20year/Operations%20Research.pdf)
3. What is Operations Research and Why is it Important?

PROGRAM CORE

Course Code	Course Title	L	T	P	S	C
25MG201022	BUSINESS ENVIRONMENT	3	-	-	-	3
Pre-Requisite	-					
Anti-Requisite	-					
Co-Requisite	-					

COURSE DESCRIPTION: The course provides an introduction to the Business Environment course is to provide students with a comprehensive understanding of the external and internal factors that influence business operations and decision-making. The course aims to equip learners with the analytical tools and frameworks needed to evaluate how economic, political, legal, technological, socio-cultural, and global forces impact businesses.

COURSE OUTCOMES: After successful completion of the course, students will be able to:

- CO1.** Understand the various external environmental factors (economic, political, legal, technological, and socio-cultural) and their influence on business strategies and operations.
- CO2.** Estimate the structure and performance of the economy, including macroeconomic indicators and government policies, and their impact on business.
- CO3.** Estimate the social, political, legal and regulatory framework within which businesses operate, including business laws and compliance requirements.
- CO4.** To assess the impact of globalization, international trade policies, and global business trends on domestic business activities.
- CO5.** To build the habit of monitoring and interpreting current economic and business trends for practical business insights.

CO-PO Mapping Table:

Course Outcomes	Program Outcomes						
	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	3	1	-	-	-	1	-
CO2	3	3	1	1	1	-	-
CO3	3	3	-	1	1	-	-
CO4	3	1	1	-	1	-	-
CO5	3	-	-	-	-	1	-
Course Correlation Mapping	3	3	1	1	1	1	-

Correlation Levels: **3: High;** **2: Medium;** **1: Low**

COURSE CONTENT

Module 1: INTRODUCTION TO OVERVIEW OF BUSINESS ENVIRONMENT (09 Periods)

Definition, Nature and Scope – Characteristics – Scope Macro and Micro Dimensions of Business Environment - Environmental Analysis.

Module 2: ECONOMIC ENVIRONMENT (09 Periods)

Economic Environment – Nature of the Economy – Structure of Economy – Economic Policies & Planning the Economic Condition – NITI Ayog – Economic Reforms and New Economic Policy – New Industrial Policy – Competition Law

Module 3: SOCIAL, POLITICAL AND LEGAL ENVIRONMENT (09 Periods)

Concept of Social Responsibility of Business towards Stakeholders - Demonetization, GST and their Impact - Political Stability - Legal Changes.

Module 4: GLOBAL ENVIRONMENT (10 Periods)

Globalization – Meaning – Role of WTO – WTO Functions - IBRD- Trade Blocks, BRICS, SAARC, ASEAN in Globalization.

Module 5: BUSINESS POLICIES AND TRENDS (08 Periods)

Monetary& Fiscal Policy, EXIM Policy, Role of EXIM Bank. Balance of Payments- Digital transformation and its strategic influence- Cybersecurity and data policy trends

Total Periods:45

EXPERIENTIAL LEARNING

LIST OF EXPERIMENTS:

- 1 Students in the form of a team should select any type of environment and present key notes
- 2 Students can present business policies and impact of policies on business trends
- 3 Collect the required data that can be used to present on global environment in the class.

RESOURCES

TEXT BOOKS:

- 1 Essentials of Business Environment, K. Aswathappa, Himalaya publishers.
- 2 Economic Environment of Business, 7th Edition, Ahuja H.L. S.chand

REFERENCE BOOKS:

- 1 Indian Economy, Dutt and Sundaram, S. Chand, New Delhi.
- 2 Business Environment – Text and Cases, Justin Paul, TMH.
- 3 Indian Economy- Misra and Puri, Himalaya.

VIDEO LECTURES:

- 1 <https://nptel.ac.in/courses/110/105/110105121>

WEB RESOURCES:

- 1 <https://www.itic.org/policy/coronavirus-response/resources-for-businesses-employers>
- 2 <https://guides.centralpenn.edu/business-management/web>
- 3 <https://www.benetrends.com/blog/top-20-web-resources-for-business-newbies/>

PROGRAM CORE

Course Code	Course Title	L	T	P	S	C
25MG202001	BUSINESS ANALYTICS FOR MANAGERS	3	-	-	-	3
Pre-Requisite	-					
Anti-Requisite	-					
Co-Requisite	-					

COURSE DESCRIPTION: This course provides an in-depth understanding of business analytics with strong understanding of extracting information from raw data, through hands-on experience with pre-defined industrial use cases / data sets; assess the role of business analyst and data science in business; assess the basic concept of data management and data mining techniques; and providing the key methods of classification, prediction, reduction, and exploration that are at the heart of data mining.

COURSE OUTCOMES: After successful completion of the course, students will be able to:

- CO1** Assess the role of business analytics and intelligence within an organization.
- CO2** Explain the significance of data warehouse and the process involving extraction, cleansing, consolidation, and transformation of heterogeneous data into a single enterprise data warehouse.
- CO3** Determine appropriate business analytics and intelligence (BAI) models and the apply descriptive analytics tools.
- CO4** Develop and apply predictive analytics models/tools to gain insight from data for business decision making.
- CO5** Analyse data and support data-driven decision-making in business environments

CO-PO Mapping Table:

Course Outcomes	Program Outcomes						
	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	3	1	-	1	-	-	-
CO2	3	3	1	1	-	-	-
CO3	3	3	-	2	1	-	-
CO4	3	3	-	2	1	1	-
CO5	3	3	1	2	2	-	-
Course Correlation Mapping	3	3	1	2	1	1	-

Correlation Levels: **3: High;** **2: Medium;** **1: Low**

COURSE CONTENT

Module 1: INTRODUCTION (08 Periods)

Introduction - What is business analytics? - Historical Overview of data analysis - Data Scientist vs. Data Engineer vs. Business Analyst - Career in Business Analytics. Statistics Vs Data Mining Vs Data Analytics Vs Data Science. Supervised Learning and Unsupervised Learning.

Module 2: DATA WAREHOUSING (08 Periods)

Data Warehousing: Concepts - Process overview - Architecture - ETL process. Business Performance Management: BPM -Strategy - Plan - Monitoring - Performance, Measurement - Business Performance Management Methodologies.

Module 3: DATA MINING AND BUSINESS APPLICATION (10 Periods)

Introduction to Data Mining - The origins of Data Mining - Data Mining Tasks. OLAP and Multidimensional data analysis Data preparation -incomplete data, missing data, erroneous data, outliers. Basic concept of Association Analysis and Cluster Analysis. Application of Business Analysis: Retail Analytics - Marketing Analytics - Financial Analytics- HR Analytics- Supply Chain Analytics- Healthcare Analytics.

Module 4: DESCRIPTIVE ANALYTICS (09 Periods)

Introduction to Descriptive analytics - Visualizing, and Exploring Data - Descriptive Statistics - Sampling and Estimation - Probability Distribution for Descriptive Analytics - Analysis of Descriptive analytics.

Module 5: PREDICTIVE ANALYTICS AND PRESCRIPTIVE ANALYTICS (10 Periods)

Introduction to Predictive analytics - Logic and Data Driven Models - Predictive Analysis Modeling and procedure - Analysis of Predictive analytics. Regression analysis, Decision theory and Cluster analysis. Introduction to Prescriptive analytics - Prescriptive Modeling - Non-Linear Optimization - Simulation, Demonstrating Business Performance Improvement.

Total Periods:45

EXPERIENTIAL LEARNING

LIST OF EXCERIES:

1. Perform linear regression on historical sales data to predict future sales.
2. Build charts comparing categorical variables (bar, pie charts).

RESOURCES

TEXT BOOKS:

1. U. Dinesh Kumar, Business Analytics, The Science of Data- Driven Decision Making, Wiley Second edition , 2022.

REFERENCE BOOKS:

1. Umesh R Hodeghatta and Umesh a Nayak, Business Analytics Using R: A Practical Approach A press, 2017.
2. Jeffery D. Camm, James J. Cochran, Michael J. Fry, Jeffrey W. Ohlmann, David R. Anderson, Essentials of Business Analytics, Cengage Learning, 2015
3. Sandhya Kuruganti, Business Analytics: Applications To Consumer Marketing, McGraw Hill, 2015

VIDEO LECTURES:

1. https://onlinecourses.nptel.ac.in/noc24_cs65/preview
2. <https://nptel.ac.in/courses/106106361>

WEB RESOURCES:

1. <https://pll.harvard.edu/course/business-analytics>
2. <https://www.ibm.com/think/topics/business-analytics>

PROGRAM ELECTIVE

Course Code	Course Title	L	T	P	S	C
25MG201023	INVESTMENT MANAGEMENT	3	-	-	-	3
Pre-Requisite	-					
Anti-Requisite	-					
Co-Requisite	-					

COURSE DESCRIPTION: This course develops an understanding of meaning of investment and its avenues - Real Assets and Financial Assets. Bond Evaluation Risk and Return Analysis of stocks. Fundamental Analysis and Technical Analysis. Portfolio Risk and return and portfolio selection – Portfolio Evaluation and Revision.

COURSE OUTCOMES: This course aims at giving in-depth knowledge on investment and portfolio selection and evaluation.

- CO1.** To understand basic Knowledge on various investment avenues
- CO2.** To examine bond evaluation process
- CO3.** To Analyze the stock market by Fundamental Analysis and Technical Analysis
- CO4.** To evaluate the Portfolio Selection
- CO5.** To appraise the evaluation of mutual funds and Revision

CO-PO Mapping Table:

Course Outcomes	Program Outcomes						
	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	3	2	-	1	-	-	-
CO2	3	2	-	1	-	-	-
CO3	3	2	-	1	-	-	-
CO4	3	2	-	1	-	-	-
CO5	3	2	-	1	-	-	-
Course Correlation Mapping	3	2	-	1	-	-	-

Correlation Levels: **3: High;** **2: Medium;** **1: Low**

COURSE CONTENT

Module 1: INTRODUCTION	(10 Periods)
Investment: Meaning – Features - Speculation and Gambling – Investment objectives – Investment Process – Investment avenues – Real Assets – Financial Assets – GDR – ADR- IDR - Financial Markets – Money Market – Capital Market.	
Module 2: RISK - RETURN AND BOND EVALUATION	(10 Periods)
Risk – Return Framework: Meaning of Risk and Return – Measurement of Return – Risk - Systematic and Unsystematic Risk – Risk Measurement – Estimation of Beta (Theory and Case Studies)	
Bond Characteristics, Prices, Yields, Ratings, Rating Procedure - Yield Curve – Determinants of interest Rates, Interest Rate Risk – Duration and Bond Portfolio Immunization (Theory and Case Studies)	
Module 3: FUNDAMENTAL AND TECHNICAL ANALYSIS	(10 Periods)
Fundamental Analysis: Meaning – Importance – Objectives – Economic Analysis – Industry Analysis – Company Analysis. Technical Analysis – Meaning – Dow Theory – Difference between Fundamental Analysis and Technical Analysis. Efficient Market Theory: Weak form – Semi-strong form – Strong form – Valuation of Equity. (Theory and Case Studies)	
Module 4: SECURITY AND PORTFOLIO ANALYSIS	(10 Periods)
Portfolio – Approaches in construction of portfolio – determination – portfolio risk and return analysis - selection – Markowitz Model – simple diversification – Efficient Frontier – The Sharpe Index Model – Single Index – Optimal Portfolio – Capital Asset Pricing Model Theory – Capital Market Line – Security Market Line - Arbitrage Pricing theory (Theory and Case Studies).	
Module 5: PERFORMANCE EVALUATION	(05 Periods)
Mutual Funds – Meaning – Structure of Mutual Funds – Classification of Mutual Funds – Exchange Traded Funds – Evaluation of Portfolios – Sharpe – Treynor and Jensen - Portfolio Revision – Need and its strategies (Theory and Case Studies).	

Total Periods:45

EXPERIENTIAL LEARNING

1. Case studies
2. Field projects
3. Assignments
4. Group discussion
5. Seminars

RESOURCES

TEXT BOOKS:

1. Bodie, Kane, Marcus, Mohanty. Investments. McGraw Hill, 2019
2. Kannadhasan. Fixed Income Securities, Valuation and Risk Management. 2022. Cengage

REFERENCE BOOKS:

1. Chandra Prasanna, Investment Analysis and Portfolio Management, Tata McGrawhill Publishing company Ltd.,
2. Punithavathy Pandian, Security Analysis and Portfolio Management, Vikas Publishing House Pvt. Ltd.,
3. Kevin, S., Security Analysis and Portfolio Management, PHI Publishers.

VIDEO LECTURES:

1. Mod-01 Lec-01 Introduction to Investment Management
2. <https://www.youtube.com/watch?v=tzasFmP1CpA>

WEB RESOURCES:

1. IAPM.pdf

PROGRAM ELECTIVE

Course Code	Course Title	L	T	P	S	C
25MG201024	CAPITAL MARKETS AND FINANCIAL SERVICES	3	-	-	-	3
Pre-Requisite	Financial Management					
Anti-Requisite	-					
Co-Requisite	-					

COURSE DESCRIPTION: This course the course is to make students aware of how financial markets function and equip the students to realize the role played by the financial intermediaries and the challenges faced by them while rendering the financial services.

COURSE OUTCOMES: After successful completion of the course, students will be able to:

- CO1.** Understand the structure and importance of Indian financial system
- CO2.** Understand the recent trends of financial markets.
- CO3.** Develop required skills to manage merchant banking and other intermediary services
- CO4.** Provide insights about evaluation of leasing services
- CO5.** Offer different types of specialized financial services to the clients

CO-PO Mapping Table:

Course Outcomes	Program Outcomes						
	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	3	1	-	1	-	-	-
CO2	3	1	-	1	-	-	-
CO3	3	1	-	1	-	-	-
CO4	3	1	-	1	-	-	-
CO5	3	1	-	1	-	-	-
Course Correlation Mapping	3	1	-	1	-	-	-

Correlation Levels: **3: High;** **2: Medium;** **1: Low**

COURSE CONTENT

Module 1: INTRODUCTION	(8 Periods)
Financial Markets, Financial Institutions, Financial Services and Financial Instruments- Role of financial system in the economic development- Financial services industry : Nature and scope of financial services-Different kinds of financial services-role of financial services in the economic development.	
Module 2: FINANCIAL MARKETS IN INDIA	(10 Periods)
Capital market: Primary and Secondary markets- Stock markets in India- Role of Securities & Exchange Board of India -SEBI guidelines on primary market- Money market and instruments.	
Module 3: MERCHANT BANKING SERVICES	(09 Periods)
Offer document- Issue Management- intermediaries- Responsibilities of lead managers – Underwriting Services- Role of Registrar-Stock Broking Services-Portfolio management services.	
Module 4 LEASE FINANCING	(10 Periods)
Different types of leases-Evaluating a financial lease. Hire purchase- Factoring-Forfaiting- Reverse Mortgage-Housing finance- Insurance Services—Microfinance: features- guidelines.	
Module 5 NON-BANKING FINANCIAL COMPANIES	(08 Periods)
Types and Overview of regulations for NBFCs in India- Specialized Financial Services : Venture Capital-Private Placement- Private Equity-Securitization & Asset Reconstruction Company. Depository system : Depository services-NSDL & CDSL- Credit rating : Importance- Credit rating agencies in India-rating procedures.	

Total Periods: 45

EXPERIENTIAL LEARNING

1. Take the recent IPOs and understand the role played by the Merchant banker and other intermediaries.
2. Analyze the credit rating procedures adopted by ICRA, CRISIL and CARE etc.,

RESOURCES

TEXT BOOKS:

1. Mishkin, F. S., & Eakins, S. Y. (Year). Financial markets and institutions. Pearson Education.
2. Khan, M. Y. (Year). Indian financial system. Tata McGraw-Hill.
3. Khan, M. Y. (Year). Financial services. Tata McGraw-Hill.
4. Gurusamy, S. (Year). Financial services. Tata McGraw-Hill.

VIDEO LECTURES:

1. <https://www.digimat.in/nptel/courses/video/110105121/L01.html>
2. <https://www.digimat.in/nptel/courses/video/110105121/L33.html>
3. <https://www.digimat.in/nptel/courses/video/110105121/L48.html>

WEB RESOURCES:

1. <https://www.himpub.com/documents/Chapter1321.pdf>
2. <https://www.geektonight.com/financial-markets-and-services-notes/>
3. http://tumkuruniversity.ac.in/oc_ug/comm/notes/FINANCIALMARKETANDSERVICES.pdf

PROGRAM ELECTIVE

Course Code	Course Title	L	T	P	S	C
25MG201025	COST ACCOUNTING	3	-	-	-	3
Pre-Requisite	-					
Anti-Requisite	-					
Co-Requisite	-					

COURSE DESCRIPTION: This course develops and understanding of Cost accounting and cost classification, preparation of cost sheet and quotations. It also enables the students to understand the preparation of overhead costing, contract costing – process costing and marginal costing.

COURSE OUTCOMES: This course aims at giving in-depth knowledge of Cost Accounting and methods of costing.

- CO1** To define the Concept of Cost Accounting
- CO2** To recognize the Elements of Cost Accounting
- CO3** To identify with the different costing methods used in business
- CO4** To evaluate the contract costing
- CO5** To discuss the Concept of Standard Costing and analyze the variances

CO-PO Mapping Table:

Course Outcomes	Program Outcomes						
	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	3	2	-	1	-	-	-
CO2	3	2	-	1	-	-	-
CO3	3	2	-	1	-	-	-
CO4	3	2	-	1	-	-	-
CO5	3	2	-	1	-	-	-
Course Correlation Mapping	3	2	-	1	-	-	-

Correlation Levels: **3: High;** **2: Medium;** **1: Low**

COURSE CONTENT

Module 1: INTRODUCTION	(05 Periods)
Cost Accounting – Objectives – Scope – Advantages and limitations – Cost Accounting vs. Financial Accounting and Cost Accounting vs. Management Accounting – Concept of Cost – Cost Classification.	
Module 2: UNIT COSTING	(10 Periods)
Cost Classification – preparation of cost sheet and Quotations.	
Module 3: ELEMENTS OF COST	(10 Periods)
Material Cost – Direct and indirect material cost – Meaning – Need and essentials of requisition for stores – Control –Functions of purchase department – Issue of material for production – Pricing methods (LIFO, FIFO & Weighted Methods of Pricing the material simple cases)	
Overheads – Classification – Allocation, apportionment and absorption of overheads. (including problems).	
Module 4: OVERHEADS AND METHODS OF COSTING	(10 Periods)
Methods of Costing: Job and Contract Costing (Simple Numerical Problems on Contract Costing.)	
Module 5: STANDARD COSTING AND VARIANCE ANALYSIS	(10 Periods)
Standard costing: Standard Cost and Standard Costing – Types of Standards – Advantages and Limitations of Standard Costing – Steps involved in Standard Costing.	
Variance analysis: Analysis of Variance – Positive and Negative Variances – Analysis of Material Variances – Analysis of Labor Variances (Simple Numerical Problems on Material and Labor Variances	

Total Periods:45

EXPERIENTIAL LEARNING

1. Present a case report on Budgeting Challenge: Real-life Scenarios in Cost Accounting
2. Give a seminar on Target Costing Challenge: Setting Profitable Prices in Competitive Markets
3. Conduct a simulation game on “Activity-Based Costing Game: Analyzing Costs for Strategic Decision Making”

RESOURCES

TEXT BOOKS:

1. Jain S.P. Narang, K.L., Agrawal simmi, Cost and Management Accounting, Kalyani Publishers, New Delhi
2. Sharma R.K., Gupta Shashi, Cost and Management Accounting, Kalyani Publishers
3. Maheswari S.N. Advanced Problems and Solutions in Cost Accounting, Sultan Chand & Sons.

REFERENCE BOOKS:

1. Rathnam P.V., Rathnam S costing advanced problems and solutions, Kitab Mahal Distributors.
2. Bhar B.K., Cost accounting methods and problems, Academic Publishers, Kolkata.
3. Pillai R.S.N., and V.Bhagavathi: Cost Accounting, Sultan Chand and Co. Ltd, New Delhi

VIDEO LECTURES:

1. <https://www.youtube.com/watch?v=tfErl0bWpRs&list=PLAhQ2ofZZRBTKhB-Moy11opzd18YAstV>
2. <https://www.youtube.com/watch?v=Dk63IDcbeU0>

WEB RESOURCES:

1. <https://icmai.in/upload/Students/Syllabus2016/Inter/Paper-8-New.pdf>
2. https://www.icsi.edu/media/webmodules/publications/FULL_BOOK_PP-CMA-2017-JULY_4.pdf
3. https://static.careers360.mobi/media/uploads/froala_editor/files/Introduction-to-Cost-and-Management-Accounting.pdf

Program Elective

Course Code	Course Title	L	T	P	S	C
25MG201026	STRATEGIC FINANCIAL MANAGEMENT	3	-	-	-	3
Pre-Requisite	Financial Accounting for Managers					
Anti-Requisite						
Co-Requisite						

COURSE DESCRIPTION: This course will provide the concepts of financial management from strategic perspective and familiarize various techniques and Models of Strategic Financial Management.

COURSE OUTCOMES: After successful completion of the course, students will be able to:

- CO1.** Discuss the concepts of financial strategy and planning
- CO2.** Analyze the risk involved in the capital budgeting
- CO3.** Demonstrate the skills required to value a business
- CO4.** Understand the different sources of financing
- CO5.** Highlight the international trade finance in a effective manner

CO-PO Mapping Table:

Course Outcomes	Program Outcomes						
	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	3	2	-	1	-	-	-
CO2	3	2	-	1	-	-	-
CO3	3	2	-	1	-	-	-
CO4	3	2	-	1	-	-	-
CO5	3	2	-	1	-	-	-
Course Correlation Mapping	3	2	-	1	-	-	-

Correlation Levels: **3: High; 2: Medium; 1: Low**

COURSE CONTENT

Module 1: INTRODUCTION TO FINANCIAL STRATEGY AND PLANNING (8 Periods)

Meaning of Strategy and Planning, Definition of Strategic Financial Management, Financial Forecasting and its techniques. Financial Planning Process, Decision making and Problem-solving Process

Module 2: RISK EVALUATION IN CAPITAL BUDGETING (10 Periods)

Decision making in risk and uncertainty, Profitability Analysis, Value of Financial Information, Sensitivity Analysis, Risk Adjusted Discount rate, certainty Equivalent

Module 3: VALUATION OF BUSINESS (10Periods)

Value of Share and Company, Asset based Valuation, Valuation relative to Industry Averages, DCF valuation Models, Valuation based on Company fundamentals

Module 4: SOURCES OF INTERNATIONAL LONG-TERM FINANCE (9 Periods)

Risks associated with International Projects Financing, Issue of ADR's/ GDR's, FCCBs and FCEBs, ECBs and FDIs, Foreign Capital Markets and Instruments.

Module 5: INTERNATIONAL TRADE FINANCE (08 Periods)

Forms of Export Finance, Documentary Credit, Export Credit and Insurance, Bilateral Credit, Special Economic Zones, Disinvestment and their strategies. Latest Development, Trends & Practices in strategic financial management - Corporate Governance, Fintech strategies, Management Buyouts.

Total Periods: 45

EXPERIENTIAL LEARNING

1. Take Nifty companies and calculate the intrinsic value of those company shares
2. Analyze the list of Indian companies that issued ADRs and FCCBs,

RESOURCES

TEXT BOOKS:

1. Jakhotiya, G. P. (2010). *Strategic financial management*. Vikas Publishing House.
2. Kishore, R. M. (2011). *Strategic financial management*. Taxmann.
3. Damodaran, A. (2004). *Corporate finance: Theory and practice* (2nd ed.). Wiley & Sons.
4. Van Horne, J. C. (2006). *Financial management and policy* (12th ed.). Prentice Hall of India.
5. Khan, M. Y., & Jain, P. K. (2009). *Basic financial management*. Tata McGraw-Hill.

VIDEO LECTURES:

1. <https://www.youtube.com/watch?v=H-I6IdSAQNc>
2. <https://www.youtube.com/watch?v=twmbixzms-c>
3. <https://www.youtube.com/watch?v=j91vzPonWtg>

WEB RESOURCES:

1. https://sist.sathyabama.ac.in/sist_coursematerial/uploads/SBAA7003.pdf
2. <https://www.icsi.edu/WebModules/Financial%20and%20Strategic%20Management.pdf>
3. <http://thuviensobvu.edu.vn/bitstream/TVDHBRVT/15223/1/Strategic-Financial-Management.pdf>

PROGRAM ELECTIVE

Course Code	Course Title	L	T	P	S	C
25MG201027	MANAGEMENT OF BANKS	3	-	-	-	3
Pre-Requisite	Financial Management					
Anti-Requisite	-					
Co-Requisite	-					

COURSE DESCRIPTION: This course will provide students with a conceptual framework of how financial decisions are undertaken in multinational companies and to familiarize students on managing the Finance function in a global context.

COURSE OUTCOMES: After successful completion of the course, students will be able to:

- CO1.** Discuss the functioning of foreign exchange market
- CO2.** Understand the various instruments traded on Forex market
- CO3.** Develop required skills to apply the foreign exchange theories in practical.
- CO4.** Evaluate and manage foreign exchange risk exposure
- CO5.** Analyze foreign exchange risks and risk management techniques

CO-PO Mapping Table:

Course Outcomes	Program Outcomes						
	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	3	1	-	2	-	-	-
CO2	3	1	-	2	-	-	-
CO3	3	1	-	2	-	-	-
CO4	3	1	-	2	-	-	-
CO5	3	1	-	2	-	-	-
Course Correlation Mapping	3	1	-	2	-	-	-

Correlation Levels: **3: High;** **2: Medium;** **1: Low**

COURSE CONTENT

Module 1: INTERNATIONAL FINANCIAL ENVIRONMENT (8 Periods)

International Monetary: -Gold Standard-Bretton Woods system-Exchange rate regimes- fixed and floating exchange rates-International Liquidity-Foreign exchange reserves- Balance of payments-IMF. (Theory only)

Module 2: FOREIGN EXCHANGE MARKET (10 Periods)

Functions and Structure of the Foreign exchange markets-major participants-Types of transactions and settlements-Exchange rate quotations-Arbitrage. (Problems and Theory).

Module 3: INTERNATIONAL PARITY (09 Periods)

Purchasing power parity-Interest rate parity-Covered interest arbitrage-Forward rate parity-International Fisher effect. (Problems and Theory)

Module 4 MANAGEMENT OF FOREIGN EXCHANGE EXPOSURE AND RISK: (10 Periods)

Types of Exposure: Transactions Exposure- Operations exposure-Interest rate exposure- Currency options-Currency futures/forwards-Currency swaps. (Problems and Theory)

Module 5 INTERNATIONAL SOURCES OF FINCANCE (08 Periods)

International Capital and Money Market Instruments: GDRs, ADRs, IDRs, Euro bonds, Euro loans, Repos, floating rate instruments, loan syndication and Euro deposits. Approaches to Project Evaluation-Risk in Cross-border Investment Decisions. (Problems and Theory)

Total Periods: 45

EXPERIENTIAL LEARNING

1. Do an analytical study about how export and import companies can make use of currency forward and currency futures contracts.
2. Analyze the list of Indian companies that issued ADRs and FCCBs,

RESOURCES

TEXT BOOKS:

1. Siddaiah T; International Finance (Pearson) 2009.
2. PG Apte: International Financial Management (Tata McGraw Hill)
3. Machi Raju International Financial Management, HPH, 2008.
4. Alan C. Shapiro: Multinational Financial Management (Wiley India)
5. Jeff Madura: International Corporate Finance (Thomson)

VIDEO LECTURES:

1. <https://www.digimat.in/nptel/courses/video/110105057/L01.html>
2. <https://www.digimat.in/nptel/courses/video/110105057/L02.html>
3. <https://www.digimat.in/nptel/courses/video/110105057/L04.html>

WEB RESOURCES:

1. <http://www.jmpcollege.org/Adminpanel/AdminUpload/Studymaterial/International%20finance.pdf>
2. <https://mu.ac.in/wp-content/uploads/2022/01/INTERNATIONAL-FINANCE.pdf>
3. <https://www.himpub.com/documents/Chapter1636.pdf>

PROGRAM ELECTIVE

Course Code	Course Title	L	T	P	S	C
25MG201028	CORPORATE RESTRUCTURING	3	-	-	-	3
Pre-Requisite	Insurance and Risk Management					
Anti-Requisite	-					
Co-Requisite	-					

COURSE DESCRIPTION: To provide concrete understanding of Mergers & Acquisitions To familiarize the concepts to the students with the current issues in M&A To expose the students about the process and methods of M&A, measures to evaluate the performance of M&A.

COURSE OUTCOMES: After completion of the course, the students will be able to Describe the process and economic rationale for M&As. Illustrate the characteristics and types of mergers. Apply the valuation techniques to M&A assessment and decision making. Explain the international policies in M&A.

- CO1.** Demonstrate uses of Mergers and Acquisitions for decision making.
- CO2.** Pursue a career in the field of corporate restructuring, Investment analysis.
- CO3.** Gain experiential learning through well-structured internships and live-projects.
- CO4.** Analyses and learn about M& A Applications and its impact on firm.
- CO5.** Understand different theories of valuation of mergers and acquisitions.

CO-PO Mapping Table:

Course Outcomes	Program Outcomes						
	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	3	2	-	1	-	-	-
CO2	3	2	-	1	-	-	-
CO3	3	2	-	1	-	-	-
CO4	3	2	-	1	-	-	-
CO5	3	2	-	1	-	-	-
Course Correlation Mapping	3	2	-	1	-	-	-

Correlation Levels: **3: High;** **2: Medium;** **1: Low**

COURSE CONTENT

Module 1: CORPORATE RESTRUCTURING (05 Periods)

Corporate Restructuring: Concept – Characteristics – Purposes for Restructuring – Forms of Corporate Restructuring: Expansion – Contraction – Corporate Control – Changes in Ownership Structures – Effects of Restructuring–Constraints of Corporate Restructuring. (Theory only)

Module 2: MERGERS (10 Periods)

Mergers: Concept- Characteristics – Merger Waves – Reasons and Objectives of Mergers – Types of Mergers – Procedure and Steps for Merger – Legal Issues and Compliances of Merger in India – Role of Investment Banker. (Theory only)

Module 3: ACQUISITIONS (10 Periods)

Acquisitions: Concept- Characteristics – Advantages – Types of Acquisitions/Takeovers – Modes of Takeover – Takeover Provisions before SEBI – SEBI Takeover Code – Takeover tactics and strategies – Constraints to Acquisitions. (Theory only)

Module 4: CORPORATE DEMERGERS (10 Periods)

Corporate Demergers: Concept- Types – Modes- Advantages of demergers/divisions/splits – Concept of Reverse Mergers – Provisions under Tax Laws for Reverse Merger – Requirements of reverse merger – Salient features of reverse merger under Sec.72 A. (Theory only)

Module 5: CROSS BORDER MERGERS AND ACQUISITIONS (10 Periods)

Cross border Mergers and Acquisitions: Motivations - Opportunities and Threats – Recent cases-Eurocurrency market: Growth of Eurocurrency market – Euro issues – External commercial – borrowings – International bond market – Indian Euro issues. RBI guidelines on ECBs, and foreign investments. Features of ADR, GDR, IDR.

Total Periods:45

EXPERIENTIAL LEARNING

LIST OF EXPERIMENTS:

1. Unit Exams and Quiz test
2. Assignments
3. Seminars & Field works

RESOURCES

TEXT BOOKS:

1. Sheeba Kapil, Financial Valuation and Modelling, Wiley, 1e,2022.
2. R. Narayanaswamy, Financial Accounting-Managerial Perspective, PHI,7e,2022.
3. Timothy Mayes, Financial Analysis with MS Excel, Cengage, 7e, 2013.
4. Vijay Gupta, Financial Analysis using Excel, VJ Books Inc, Canada.

REFERENCE BOOKS:

1. Simon Bennings, Financial Modelling-Using Excel, MIT Press, Camberidge,3e
2. Cairns, A.J. G (2004), "Interest Rate Models: An Introduction", Princeton University Press, ISBN: 9780691118949
3. John Y. Campbell, Andrew W. Lo, & A. Craig MacKinlay (1997), "The Econometrics of Financial Markets", Princeton University Press, ISBN: 9780691043012
4. Ruey S. Tsay (2010), "Analysis of Financial Time Series", 3rd Edition, Wiley, ISBN: 978-0-470- 41435-4

VIDEO LECTURES:

1. <https://youtu.be/NtXV3YGr988>
2. <https://youtu.be/WBHzCDgEtVQ>
3. <https://youtu.be/p0Bx6UtherQ>
4. <https://youtu.be/9zn2lWCwVOg>

WEB RESOURCES:

1. <https://www.investopedia.com/terms/m/mergersandacquisitions.asp>
2. https://www.nishithdesai.com/fileadmin/user_upload/pdfs/Research%20Papers/Mergers___Acquisitions_in_India.pdf
3. <https://corporatefinanceinstitute.com/resources/valuation/mergers-acquisitions-ma/>
4. <https://www.edupristine.com/blog/mergers-acquisitions>
5. <https://www.wallstreetmojo.com/top-best-mergers-and-acquisitions-ma-books/>

PROGRAM ELECTIVE

Course Code	Course Title	L	T	P	S	C
25MG201029	BEHAVIORAL FINANCE	3	-	-	-	3

Pre-Requisite Financial Management

Anti-Requisite -

Co-Requisite -

COURSE DESCRIPTION: to understand Cognitive basis of behavioral finance and learn about the wide range of decision-making biases and information processing errors that influence our financial decision-making.

COURSE OUTCOMES: After completion of the course, the students will be able to Explain the key terms associated with behavioral finance and corporate finance Illustrate the various theories associated with behavioral finance and parameters of investing in financial market.

- CO1.** Demonstrate competencies in Behavioral finance and decision making
- CO2.** Pursue a career in the field of Financial Markets, Social behavior for Investment decision and allied professions in the field of Finance.
- CO3.** To get knowledge through experiential learning through well-structured internships and live projects.
- CO4.** Analyses various External factors and investors behavior factors for investment decisions.
- CO5.** Understand Cognitive basis of behavioral finance.

Co-Po Mapping Table

Course Outcomes	Program Outcomes						
	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	3	2	-	1	-	-	-
CO2	3	2	-	1	-	-	-
CO3	3	2	-	1	-	-	-
CO4	3	2	-	1	-	-	-
CO5	3	2	-	1	-	-	-
Course Correlation Mapping	3	2	-	1	-	-	-

Correlation Levels: **3: High;** **2: Medium;** **1: Low**

COURSE CONTENT

Module 1: INTRODUCTION TO BEHAVIORAL FINANCE (05 Periods)

Introduction to Behavioral finance – Nature, scope, objectives and application; Investment Decision Cycle: Judgment under Uncertainty: Cognitive information perception - Peculiarities (biases) of quantitative and numerical information perception - Representativeness – Anchoring - Exponential discounting - Hyperbolic discounting

Module 2: UTILITY/ PREFERENCE FUNCTIONS (10 Periods)

Utility/ Preference Functions: Expected Utility Theory [EUT] and Rational Thought: Decision making under risk and uncertainty - Expected utility as a basis for decision-making – Theories based on Expected Utility Concept - Investor rationality and market efficiency.

Module 3: BEHAVIORAL FACTORS AND FINANCIAL MARKETS (10 Periods)

Behavioral Factors and Financial Markets: The Efficient Markets Hypothesis – Fundamental Information and Financial Markets - Information available for Market Participants and Market Efficiency -Market Predictability -The Concept of limits of Arbitrage Model - Asset management and behavioral factors - Active Portfolio Management: return statistics and sources of systematic underperformance. -Fundamental information and technical analysis – the case for psychological influence.

Module 4: BEHAVIORAL CORPORATE FINANCE (10 Periods)

Behavioral Corporate Finance: Behavioral factors and Corporate Decisions on Capital Structure and Dividend Policy - Capital Structure dependence on Market Timing -. Systematic approach to using behavioral factors in corporate decision-making. External Factors and Investor Behavior: Mechanisms of the External Factor influence on risk perception and attitudes - Connection to human psychophysiology and emotional regulation Active portfolio management – the source of the systematic underperformance.

Module 5: CORPORATE BEHAVIORAL FINANCE (10 Periods)

CORPORATE BEHAVIORAL FINANCE: Introduction, Corporate decision making: Heuristic approach, prospect theory, market variables, herding effect, behavior of investors and inefficiency of market, Empirical data on presence and absence of dividend, Ex-Dividend Day behavior, timing of corporate news announcement, Behavioral life cycle.

Total Periods:45

EXPERIENTIAL LEARNING

LIST OF EXPERIMENTS:

1. Write an Assignment on Financial Wellness.
2. Project work related on Behavioral finance concepts
3. Seminars and Presentations

RESOURCES

TEXT BOOKS:

1. Behavioral Finance: Psychology, Decision-Making, and Markets", by Ackert and Deaves.
2. Understanding Behavioral Finance by Ackert.
3. What Investors Really Want - Learn the lessons of behavioral Finance, Meir Statman, McGraw-Hill.
4. Behavioral Finance by Shuchitasingh, ShilpaBahl

REFERENCE BOOKS:

1. Behavioral Finance - Wiley Finance - Joachim Goldberg, Rüdiger von Nitzsch.
2. Behavioral Finance – Peter DybdahlHede.
3. Behavioral Finance – Ackert, L.F. &Deaves,R.

VIDEO LECTURES:

1. https://www.youtube.com/watch?v=5JGz3ua_48o
2. <https://www.youtube.com/watch?v=d243eAQgEI>
3. <https://www.youtube.com/watch?v=PFfhbPcJzuE>
4. <https://www.youtube.com/watch?v=chSHqogx2CI>

WEB RESOURCES:

1. <https://www.imit.ac.in/note/18MBA402Bbf.pdf>
2. <https://www.rcemorissa.org/images/BF.pdf>
3. <https://www.hit.ac.in/download/LectureNote/MBA/4thSem/behavioral-finance%20MBA4th.pdf>
4. <https://www.amazon.in/behavioral-finance/s?k=behavioral+finance>
5. <https://corporatefinanceinstitute.com/resources/capital-markets/behavioral-finance/>

PROGRAM ELECTIVE

Course Code	Course Title	L	T	P	S	C
25MG202002	FINANCIAL ANALYTICS	2	-	2	-	3
Pre-Requisite	-					
Anti-Requisite	-					
Co-Requisite	-					

COURSE DESCRIPTION: An introduction to methods and tools useful in decision-making in the financial industry, which may from time to time include: macroeconomic event studies, analysis of term structures, equity data analysis, style analysis, credit risk, extreme value analytics, trading analytics, volatility measurement, portfolio management, and enterprise risk management.

COURSE OUTCOMES: The objective of this course is to gain an understanding of how managers use financial analytics to formulate and solve business problems and to support managerial decision making.

- CO1.** Demonstrate competencies in financial analysis and decision making
- CO2.** Pursue a career in the field of Risk management, Investment banking and allied professions in the field of Finance and Accounting
- CO3.** Gain experiential learning through well-structured internships and live-projects.
- CO4.** to analyses and learn about India through association of ideas in the texts and the external contexts
- CO5.** To Understand Survival analysis and its application- Six Sigma through R

CO-PO Mapping Table:

Course Outcomes	Program Outcomes						
	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	3	2	-	1	-	-	-
CO2	3	2	-	1	-	-	-
CO3	3	2	-	1	-	-	-
CO4	3	2	-	1	-	-	-
CO5	3	2	-	1	-	-	-
Course Correlation Mapping	3	2	-	1	-	-	-

Correlation Levels: **3: High;** **2: Medium;** **1: Low**

COURSE CONTENT

Module 1: INTRODUCTION TO FINANCIAL ANALYTICS (05 Periods)

Introduction to Financial Analytics: Scope of financial Analytics- recent trends in financial analytics-Business Intelligence, Business Analytics, Spread sheet Analysis and Modelling, Applications and Challenges in Financial Analytics. Marketing and Financial Analytics- HR Analytics- its Advantages & Disadvantages.

Module 2: PREDICTIVE ANALYSIS (05 Periods)

Predictive Analysis: Simple linear regression, Multiple linear regression- logistic and Multinominal regression- Forecasting Techniques: Application of Predictive Analytics in retail – Direct marketing- Financial services-financial Time Series Their Characteristics.

Module 3: ASSET PORTFOLIO MODELS (07 Periods)

Asset Portfolio Models: Basics of portfolio construction, Markowitz Theorem, Diversification and Portfolio Optimization Modelling Volatility and Risk: Characteristics of volatility. Modelling volatility using ARCH/GARCH models. Data Analysis in Finance: Non synchronous Trading, Bid-Ask Spread of trading Prices, Empirical Characteristics of Trading Data.

Module 4: MODELLING CREDIT RISK (08 Periods)

Modelling Credit Risk: Corporate Liabilities as contingent claims, Endogenous default boundaries and optional Capital Structure, Intensity Modelling, rating based term-structure models, Credit risk and interest-rate Swaps, modelling dependent defaults Derivative Pricing: Modelling derivative prices: Binomial Model, Black Scholes model. Portfolio management- Process-Calculation of Portfolio Mean and Variance - Covariance Matrix- CAPM.

Module 5: STOCHASTIC ANALYTICS (05 Periods)

Stochastic Analytics: Introduction to Stochastic models- Markov models- Renewal theory- Markov decision process and application in Sequential decision making. Analytics under uncertainty: Survival analysis and its application- Six Sigma and Problem-Solving Methodology-Lean Thinking.

Total Periods:30

EXPERIENTIAL LEARNING: Case studies, group discussion, Assignments, Field study reports

LIST OF EXPERIMENTS:

1. Financial Analytics lab
2. Financial tools and Techniques
3. PSS using Excel

RESOURCES

TEXT BOOKS:

1. Sheeba Kapil, Financial Valuation and Modelling, Wiley, 1e,2022.
2. R. Narayanaswamy, Financial Accounting-Managerial Perspective, PHI,7e,2022.
3. Timothy Mayes, Financial Analysis with MS Excel, Cengage, 7e, 2013.
4. Vijay Gupta, Financial Analysis using Excel, VJ Books Inc, Canada.

REFERENCE BOOKS:

1. Bennings, S. (Year). Financial modelling using Excel (3rd ed.). MIT Press.
2. Cairns, A. J. G. (2004). Interest rate models: An introduction. Princeton University Press.
3. Campbell, J. Y., Lo, A. W., & MacKinlay, A. C. (1997). The econometrics of financial markets. Princeton University Press.
4. Tsay, R. S. (2010). Analysis of financial time series (3rd ed.). Wiley.

VIDEO LECTURES:

1. https://www.youtube.com/watch?v=k_pVXpX-X38
2. <https://www.youtube.com/watch?v=kJy3NOpCbWc>
3. <https://www.udemy.com/course/financial-analytics-in-practice/>
4. <https://www.caclubindia.com/coaching/professional-analysis-of-financial-statements-3685.asp>

WEB RESOURCES:

1. Students have to bring their laptops installed with R and R Studio. Download R from <http://cran.rproject.org/> and R Studio from <http://www.rstudio.com/products/rstudio/download/>
2. https://personal.ntu.edu.sg/nprivault/MH8331/financial_risk_analytics.pdf
3. <https://online-execed.wharton.upenn.edu/financial-analytics>

Course Code	PROGRAM ELECTIVE Course Title	L	T	P	S	C
25MG201030	FINANCIAL PLANNING AND WEALTH MANAGEMENT	3	-	-	-	3
Pre-Requisite	-					
Anti-Requisite	-					
Co-Requisite	-					

COURSE DESCRIPTION: This course develops an understanding of what is derivative, and the structure of the derivative market, types of derivatives Product and derivatives market trading process. Forwards, Futures, Options and Swaps their futures and their calculations – pay offs and options premium etc.,

COURSE OUTCOMES: This course aims at giving in-depth knowledge of Financial Derivatives and its products Forwards – Futures – Options and Swaps.

- CO1** To understand basic Knowledge of Financial Derivatives
- CO2** To examine the Futures and its investment
- CO3** To Analyze the options
- CO4** To evaluate the options Strategies
- CO5** To review the Swaps

CO-PO Mapping Table:

Course Outcomes	Program Outcomes						
	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	3	2	-	1	-	-	-
CO2	3	2	-	1	-	-	-
CO3	3	2	-	1	-	-	-
CO4	3	2	-	1	-	-	-
CO5	3	2	-	1	-	-	-
Course Correlation Mapping	3	2	-	1	-	-	-

Correlation Levels: **3: High;** **2: Medium;** **1: Low**

COURSE CONTENT

Module 1: INTRODUCTION (05 Periods)

Derivatives - Introduction - Evolution - Structure of Derivatives Markets -Types of Derivatives - Underlying Asset - Participants in Derivatives Market - Derivatives Trading process and Technical terminologies.

Module 2: FORWARDS AND FUTURES (10 Periods)

Forwards and Futures: Forwards - Meaning - characteristics - pricing - Pay-offs - **Futures** - Characteristics - Trading Process - Mode of Settlement - pricing - Pay-offs. Difference between forwards contract and futures contract - Role of clearing house (Theory and Cases)

Module 3: VALUATION OF OPTIONS (10 Periods)

Options Pricing: Options - Salient features of Options - Types of Options - Moneys of Options - Pay off function of Call and Put Options - Valuation of Pricing - Black - Scholes Model - Options Pricing on dividend paying stocks - Binomial Model - One period - Two period (Theory and Cases).

Module 4: OPTIONS STRATEGIES (05 Periods)

Trading strategies with options - Bullish - Bearish - Non-directional Strategies - Straddle - Strangle - Strip - others - Put - Call Parity.

Module 5: SWAPS (10 Periods)

Swaps: Meaning - Features of SWAPS - Types of SWAPS - Interest Rate Swaps - Currency Swaps - Equity Swaps - Mechanics of interest rate swaps - Valuation of interest rate swaps - Valuation of Currency Swaps. (Theory and Cases)

Total Periods:45

EXPERIENTIAL LEARNING

LIST OF EXPERIMENTS:

1. Providing to the students with hands-on, practical experience which go on beyond traditional classroom lectures.
2. Assign students the task of managing a simulated investment portfolio that includes various derivative instruments.
3. Assign task to the students to Conduct independent research on specific derivatives markets or products. Analyze historical data, market trends and the impact of economic events on derivative prices.
4. Encourage students to analyze market data and observe how option prices change based on market conditions.
5. Organize role-playing exercises where students take on the roles of buyers and sellers of options.

RESOURCES

TEXT BOOKS:

1. Hull, J. C., & Basu, S. (Year). Options, futures, and other derivatives. Pearson.
2. Srivastava, R. (Year). Derivatives and risk management. Oxford University Press.
3. Dhamija, A. (Year). An introduction to derivatives and risk management. Cengage Learning India Pvt. Ltd.

REFERENCE BOOKS:

1. Hull, J. C., & Basu, S. (Year). Options, futures, and other derivatives. Pearson.
2. Srivastava, R. (Year). Derivatives and risk management. Oxford University Press.
3. Dhamija, A. (Year). An introduction to derivatives and risk management. Cengage Learning.

VIDEO LECTURES:

1. https://www.youtube.com/playlist?list=PLLy_2iUCG87CTB2vv9njHaJbmQoa9S5gK
2. <https://archive.nptel.ac.in/courses/110/107/110107128/>

WEB RESOURCES:

1. https://ebooks.ipude.in/management/mba/term_4/DMGT513_DERIVATIVES_AND_RISK_MANAGEMENT.pdf
2. <https://www.imf.org/external/bopage/pdf/98-1-20.pdf>
3. https://www.iare.ac.in/sites/default/files/lecture_notes/IARE_FD_NOTES.pdf

PROGRAM ELECTIVE

Course Code	Course Title	L	T	P	S	C
25MG202003	FINTECH	2	-	2	-	3
Pre-Requisite	-					
Anti-Requisite	-					
Co-Requisite	-					

COURSE DESCRIPTION: An introduction to methods and tools useful in decision-making in the financial industry, which may from time to time include: Bank tech, Data tech, and Reg Tech and Eco system of Fintech Applications in real time scenario.

COURSE OUTCOMES: The objective of this course is to gain an understanding of how managers use financial Tech to formulate and solve business problems and to support managerial decision making.

- CO1.** Demonstrate competencies in financial analysis and decision making
- CO2.** Pursue a career in the field of Risk management, Investment banking and allied professions in the field of Finance and Accounting
- CO3.** Gain experiential learning through well-structured internships and live-projects.
- CO4.** Analyses and learn about Banking operations through Fintech applications.
- CO5.** Understand Survival analysis and Fin tech application

CO-PO Mapping Table:

Course Outcomes	Program Outcomes						
	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	3	2	-	1	-	-	-
CO2	3	2	-	1	-	-	-
CO3	3	2	-	1	-	-	-
CO4	3	2	-	1	-	-	-
CO5	3	2	-	1	-	-	-
Course Correlation Mapping	3	2	-	1	-	-	-

Correlation Levels: **3: High;** **2: Medium;** **1: Low**

COURSE CONTENT

Module 1: INTRODUCTION TO FINANCIAL ANALYTICS (05 Periods)

FinTech Introduction - Transformation -FinTech Evolution: Infrastructure, Banks Startups and Emerging Markets - Collaboration between Financial Institutions and Startups -FinTech Typology - Emerging Economics: Opportunities and Challenges.

Module 2: BANK TECH (05 Periods)

Bank tech: Regulatory Framework for Product Pricing, loan origination and servicing - social media-based profiling, comparison tools and aggregators -Dynamic credit rating, Risk management & underwriting -Using Credit Counsellor Robo/Bot for faster approvals & funding - Utilizing data science tools and machine learning for data mining/ cross sale -Hybrid Lending Products- Digital Financial Services – Mobile Money – Regulation of Mobile Money – SFMS - RTGS - NEFT –NDS Systems.

Module 3: DIGITAL FINANCE (07 Periods)

Payments & Architecture and Technologies: Global Payment Ecosystem - Payments Architecture and Setup - Innovation in Consumer and Retail payments -Popular Payments Technology – Blockchain and Cryptography: Cryptography - Application to Blockchain - Hash Functions - Public Key Cryptography and Signing - Use cases and applications- Payment Stacks in India –B2B & B2B2C solutions –Digital Finance-Introduction – Brief History of Financial Innovation – Digitization of Financial Services - FinTech & Funds- Crowd funding- Regards, Charity and Equity

Module 4: REGTECH ECOSYSTEM (08 Periods)

RegTech Ecosystem: FinTech Regulations & Evolution of RegTech- Financial Institutions – RegTech Ecosystem Ensuring Compliance from the Start: Suitability and Funds – RegTech Startups: Challenges –RegTech Ecosystem: Regulators Industry – Use Case of AI in Smart Regulation and Fraud Detection – Regulatory Sandboxes – Smart Regulation – Redesigning Better Financial Infrastructure- How AI is Transforming the Future of FinTech – Digital Identity – New Challenges of AI and Machine Learning - Challenges of Data Regulation.

Module 5: DATA TECH (05 Periods)

Data Tech - Introduction - History of Data Regulation – Data in Financial Services –Application of Data Analytics in Finance - Methods of Data Protection: GDPR Compliance and Personal Privacy – Data is the New Oil: Risk of Breach – The Future of Data-Driven Finance ROBO-Advisory: Robo Advisory - Automating Investment rules - ML/AI in Robo-advisory -Robo-advisory Platforms and Architecture - Building a Robo Advisory Platform - Unicorns of Robo-advisory and business models - State of Robo-advisory in India.

Total Periods:30

EXPERIENTIAL LEARNING: Case studies, group discussion, Assignments, Field study reports

LIST OF EXPERIMENTS:

1. Financial Analytics
2. e- Trading of Stocks
3. Cryptocurrency & Blockchain

RESOURCES

TEXT BOOKS:

1. Sheeba Kapil, Financial Valuation and Modelling, Wiley, 1e,2022.
2. R. Narayanaswamy, Financial Accounting-Managerial Perspective, PHI,7e,2022.
3. Timothy Mayes, Financial Analysis with MS Excel, Cengage, 7e, 2013.
4. Agustin Rubini, "Fintech in a Flash: Financial Technology Made Easy", Zaccheus, 3rd Edition, 2018.

REFERENCE BOOKS:

1. Simon Bennings, Financial Modelling-Using Excel, MIT Press, Camberidge,3e
2. Cairns, A.J. G (2004), "Interest Rate Models: An Introduction", Princeton University Press, ISBN: 9780691118949
3. Theo Lynn, John G. Mooney, Pierangelo Rosati, Mark Cummins, "Disrupting Finance: FinTech and Strategy in the 21st Century", Palgrave, 1st edition, 2018 4.
4. Abdul Rafay, "FinTech as a Disruptive Technology for Financial Institutions", IGI Global, January, 2019 5.

VIDEO LECTURES:

1. https://www.youtube.com/watch?v=k_pVXpX-X38
2. <https://www.youtube.com/watch?v=kJy3NOpCbWc>
3. <https://www.udemy.com/course/financial-analytics-in-practice/>
4. <https://www.caclubindia.com/coaching/professional-analysis-of-financial-statements-3685.asp>

WEB RESOURCES:

1. Students have to bring their laptops installed with R and R Studio. Download R from <http://cran.rproject.org/> and R Studio from <http://www.rstudio.com/products/rstudio/download/>
2. https://personal.ntu.edu.sg/nprivault/MH8331/financial_risk_analytics.pdf
3. <https://online-execl.wharton.upenn.edu/financial-analytics>

PROGRAM ELECTIVE

Course Code	Course Title	L	T	P	S	C
25MG201031	ARTIFICIAL INTELLIGENCE FOR FINANCE	3	-	-	-	3
Pre-Requisite	-					
Anti-Requisite	-					
Co-Requisite	-					

COURSE DESCRIPTION: This course provides an in-depth understanding of the role of Artificial Intelligence (AI) in the financial sector. It explores the fundamentals of AI, machine learning, and their applications in banking, investment, risk management, fraud detection, and financial forecasting. The course also addresses practical tools and ethical concerns, preparing students for AI-driven financial environments.

COURSE OUTCOMES

- CO1.** Analyze AI applications in banking, investment, trading, and customer service.
- CO2.** Apply AI tools to build predictive financial models using real-world datasets.
- CO3.** Evaluate the ethical, legal, and governance implications of AI in finance.
- CO4.** Demonstrate practical knowledge through case studies, simulations, and tools.

CO-PO Mapping Table:

Course Outcomes	Program Outcomes						
	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	3	2	-	1	-	-	-
CO2	3	2	-	1	-	-	-
CO3	3	2	-	1	-	-	-
CO4	3	2	-	1	-	-	-
CO5	3	2	-	1	-	-	-
Course Correlation Mapping	3	2	-	1	-	-	-

Correlation Levels: **3: High; 2: Medium; 1: Low**

COURSE CONTENT

Module 1: INTRODUCTION TO AI AND ITS ROLE IN FINANCE (09 Periods)

Basics of AI, ML, DL, NLP, AI in decision-making and financial operations, Traditional vs AI-based analytics, Introduction to AI tools and platforms RegTech and automation

Module 2: AI IN BANKING AND FINANCIAL SERVICES (09 Periods)

Credit scoring and loan automation, Fraud detection using AI models, AI-driven customer service (chatbots, sentiment analysis), AI in insurance and wealth management

Module 3: AI IN CAPITAL MARKETS AND INVESTMENT (09 Periods)

Algorithmic and high-frequency trading, Robo-advisory systems, AI for behavioral and sentiment-based investing, Portfolio optimization with ML tools

Module 4: AI IN FINANCIAL FORECASTING AND RISK MANAGEMENT (09 Periods)

Predictive analytics and time series modeling, Market risk and volatility modeling, Stress testing and compliance automation, Blockchain and AI integration for security.

Module 5: ETHICAL, REGULATORY AND FUTURE ASPECTS (09 Periods)

Ethical issues: Bias, explainability, accountability, Data privacy and regulatory compliance (RBI, GDPR, SEBI), Case studies: AI adoption in Indian and global finance Future of AI in financial careers.

Total Periods:45

EXPERIENTIAL LEARNING

EXPERIENTIAL LEARNING

1. Develop an AI model using Python to predict loan defaults
2. Case study analysis of AI in a leading Indian bank (e.g., HDFC, ICICI)
3. Hands-on lab with sentiment analysis on financial news
4. Simulation of a robo-advisor system
5. Group presentation on AI ethical dilemmas in finance

RESOURCES

TEXT BOOKS:

1. Marwala, T. (2021). Artificial Intelligence and Economic Theory: Skynet in the Market. Springer.
2. Chishti, S., & Barberis, J. (2020). The AI Book. Wiley.

REFERENCE BOOKS:

1. López de Prado, M. (2018). Advances in Financial Machine Learning. Wiley
2. Geron, A. (2019). Hands-On Machine Learning with Scikit-Learn, Keras, and TensorFlow. O'Reilly.

VIDEO LECTURES:

1. <https://nptel.ac.in/courses/110/105/110105121>
2. <https://www.coursera.org/learn/ai-for-everyone>
3. https://www.youtube.com/results?search_query=AI+in+Finance+tutorials

WEB RESOURCES:

1. <https://www.sebi.gov.in/>
2. <https://online-execon.wharton.upenn.edu/financial-analytics>

PROGRAM ELECTIVE

Course Code	Course Title	L	T	P	S	C
25MG201032	INDUSTRIAL RELATIONS AND LABOUR LAWS	3	-	-	-	3
Pre-Requisite	-					
Anti-Requisite	-					
Co-Requisite	-					

COURSE DESCRIPTION: The objective of the course is to provide an understanding of the legal framework and focuses on industrial relations importance. The student able to know the causes of industrial disputes and conflicts. As HR specialist while framing of HR policies and regulations this course helps.

COURSE OUTCOMES: After successful completion of the course, students will be able to:

- CO1.** Understand the concepts and significance of Industrial Relations
- CO2.** To know about how to deal Industrial Disputes and Various Dispute Resolution Techniques
- CO3.** Understand the legal framework in India
- CO4.** Laws relating to Remuneration.
- CO5.** Focus on Laws relating to Social Security Measures.

CO-PO Mapping Table:

Course Outcomes	Program Outcomes						
	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	3	2	-	2	-	2	-
CO2	3	3	-	2	2	3	-
CO3	3	2	-	3	-	3	-
CO4	2	2	-	3	-	3	-
CO5	2	2	-	3	-	3	-
Course Correlation Mapping	3	2	-	3	2	3	-

Correlation Levels: **3: High;** **2: Medium;** **1: Low**

COURSE CONTENT

Module 1: INDUSTRIAL RELATIONS	(09 Periods)
Concepts, Significance, trends in India. Trade Unionism – theory, policy, their influence on HRM, objectives and functions, structure, types, trade unions Act, 1926	
Module 2: INDUSTRIAL DISPUTES & CONFLICTS	(09 Periods)
Causes, Types, Consequences, Prevention, Settlement, Conciliation, Arbitration, Adjudication. Causes of Grievances & Disputes. Role IR Officer. Government Machinery for Industrial Relations. Industrial Disputes Act ,1947 - preventive and settlement machinery	
Module 3: LEGAL FRAME WORK IN INDIA	(10 Periods)
Evolution of labour laws in India – labour legislations – meaning, importance and relevance to HRM. Industrial employment (standing orders) Act,1946 – Factories Act 1948	
Module 4: LAWS RELATING TO REMUNERATION	(09 Periods)
Payment of wages Act, 1936, Minimum wages Act, 1948 – Payment of Bonus Act, 1965	
Module 5: LAWS RELATING TO SOCIAL SECURITY	(08 Periods)
Work men's compensation Act,1923 – ESI Act, 1948- Employees provident fund and miscellaneous provisions Act,1952 – Maternity benefits Act,- 1961 Payment of gratuity Act, 1972	
Total Periods:45	

EXPERIENTIAL LEARNING

1. Present a case study report on Employment Law Clinic: Real-world Problem Solving
2. Worker Representation in Decision Making: Role-play and Discussion
3. Demonstrate collective Bargaining Simulation: Negotiating for Mutual Gains

RESOURCES

TEXT BOOKS:

1. Tripathi, P. C. (Year). Industrial relations and labour laws. Sultan Chand & Sons.
2. Kapoor, N. D. (Year). Mercantile law. Sultan Chand & Sons.

REFERENCE BOOKS:

1. Industrial Relations and labour laws - Sri Vastva – vikas publishers
2. Industrial Relations and laws in India – Agarwal LL
3. Industrial Relations and labour laws - Sinha &sinha, Oxford IBH

VIDEO LECTURES:

1. <https://www.youtube.com/watch?v=rpIIj8kbPBQ>
2. <https://www.youtube.com/watch?v=Y4XHzX5VE7g>

WEB RESOURCES:

1. https://baou.edu.in/assets/pdf/PGDHR_201_slm.pdf
2. <https://www.icsi.edu/media/website/IndustrialLabour&GeneralLaws.pdf>

PROGRAM ELECTIVE

Course Code	Course Title	L	T	P	S	C
25MG201033	TALENT MANAGEMENT	3	-	-	-	3
Pre-Requisite	-					
Anti-Requisite	-					
Co-Requisite	-					

COURSE DESCRIPTION: To understand the importance of nurturing Talent and managing Talent in the organization.

COURSE OUTCOMES: After successful completion of the course, students will be able to:

- CO1.** Understand Talent Management Process
- CO2.** Understand the concepts of Succession and career planning approaches and its role.
- CO3.** Handle different work conditions for development
- CO4.** Analyse probability of talent and utilization of resources of organization
- CO5.** Understand the different climates of talent management for making effective decisions of talent management

CO-PO Mapping Table:

Course Outcomes	Program Outcomes						
	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	3	2	-	2	2	-	2
CO2	3	2	2	2	2	-	2
CO3	2	2	3	2	3	-	2
CO4	3	3	2	2	3	2	3
CO5	3	3	2	3	3	2	3
Course Correlation Mapping	3	2	2	2	3	2	2

Correlation Levels: **3: High; 2: Medium; 1: Low**

COURSE CONTENT

Module 1: TALENT MANAGEMENT *(09 Periods)*

Meaning, importance, Evolution, Talent Management System, Talent Reservoir – Components, Talent Management Grid Competence –Core Competency, Competency Assessment, Competency Modeling

Module 2: SUCCESSION AND CAREER PLANNING *(09 Periods)*

Succession Planning – Traditional Approaches, Contemporary Approaches, Talent Acquisition - Talent Identification & Business Alignment, Recruiting & Assessment, Talent Development – Coaching – Remedial Coaching, Attitude Based Coaching.

Module 3: TALENT RETENTION *(09 Periods)*

Cost and consequences of talent departure, diagnosing causes of talent departure, measuring and monitoring turnover and retention data, designing engagement strategies, drivers of engagements

Module 4: RETURN ON TALENT *(09 Periods)*

Measuring contribution of talent to business performance, talent metrics, measuring human capital investment, transformation and reorganization of HR, new imperatives, and talent forces of tomorrow.

Module 5: TALENT MANAGEMENT AND CONTEMPORARY ISSUES *(09 Periods)*

Introduction, Organizational Issues, Talent Management Challenges, Best Practices of Talent Management, Talent Management in India and in global environment.

Total Periods:45

EXPERIENTIAL LEARNING

1. Give a training needs analysis case and ask the students to find out the Talent Competencies.
2. Implement various training methods, observe the knowledge process and submit report
3. The case studies will be collected as Assignments and the same will be evaluated.

RESOURCES

TEXT BOOKS:

1. Scullion, H., & Collings, D. G. (2011). Global talent management. Routledge.
2. Becerra-Fernandez, I., Gonzalez, A., & Sabherwal, R. (2009). Talent management: Challenges, solutions, and technologies. Pearson.
3. Berger, L. A., & Berger, D. R. (2008). The talent management handbook (2nd ed.). Tata McGraw-Hill.

REFERENCE BOOKS:

1. Sudhir Warier, Knowledge Management, Vikas, 2004.
2. Ravinder Shukla, Talent Management: Process of Developing and Integrating Skilled Workers, Global India Publications, 2009.
3. Marshall Goldsmith, Louis Carter, Best Practices in Talent Management: How the World's Leading Corporations, Wiley ,2010.

VIDEO LECTURES:

1. <https://hbsp.harvard.edu/cases/>

WEB RESOURCES:

1. <https://kpmg.com/in/en/home/services/Knowledge-academy/course-Talent Management>
2. <https://www.citehr.com/>
3. <https://www.icmrindia.org>
4. <https://www.talent-hr-guide.com>

PROGRAM ELECTIVE

Course Code	Course Title	L	T	P	S	C
25MG201034	KNOWLEDGE MANAGEMENT	3	-	-	-	3
Pre-Requisite	-					
Anti-Requisite	-					
Co-Requisite	-					

COURSE DESCRIPTION: To make the students realize the importance of capturing knowledge elements and its structures application as a competitive advantage to business.

COURSE OUTCOMES: After successful completion of the course, students will be able to:

- CO1.** Understand the challenges of Knowledge Based Organizations and the HR mechanisms to manage them effectively.
- CO2.** Identify the importance of the values of autonomy and accountability in Knowledge based organizations
- CO3.** Identify the source of Knowledge and its significance working for development
- CO4.** Assess the probability of Knowledge and utilization of resources of organization
- CO5.** Assume the different climates of Knowledge management for making effective decisions of Knowledge management

CO-PO Mapping Table:

Course Outcomes	Program Outcomes						
	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	3	2	2	2	2	-	2
CO2	2	2	3	2	3	-	2
CO3	3	2	2	2	-	-	3
CO4	3	3	2	2	2	2	3
CO5	3	3	2	3	3	2	3
Course Correlation Mapping	3	3	2	2	2	2	3

Correlation Levels: **3: High; 2: Medium; 1: Low**

COURSE CONTENT

Module 1: INTRODUCTION TO KNOWLEDGE MANAGEMENT (09 Periods)

Knowledge Society - Types of Knowledge - An Introduction to life in organizations - Concept and Characteristics of KBOs - Dimensions of HRM in KBOs - New Role and Challenges for HRM in the KBOs.

Module 2: MANAGING KNOWLEDGE FOR ORGANIZATIONAL EFFECTIVENESS (09 Periods)

Process and Methods- Concept of Intellectual Capital and Learning Orientation in the Organizations - Knowledge and Role related issues - Performance Appraisal in a KBO - Intellectual Property Rights (IPR).

Module 3: STRATEGIC KNOWLEDGE MANAGEMENT (09 Periods)

Concept, Forces Driving Knowledge Management, Knowledge Management Systems, Issues in Knowledge Management, Knowledge Management Strategies, Technologies for Knowledge Management, Factors influencing Knowledge Management.

Module 4: PERSPECTIVES OF TALENT BY KNOWLEDGE MANAGEMENT (09 Periods)

Understanding Nature of Knowledge: Views of Knowledge – Subjective and Objective, Types of Knowledge – Location of Knowledge – Knowledge in People, Knowledge in Artifacts, Knowledge Management Assessment – Types of Assessment, Importance of KM Assessment

Module 5: PRACTICING KNOWLEDGE MANAGEMENT (09 Periods)

Knowledge Management Processes –Technologies, Knowledge Management Approaches – Hansen-Earl's Seven Schools of Knowledge Management, Alverson and Karreman's knowledge Management, Organizational Impacts of Knowledge Management – on People, Processes, Products and Organizational Performance.

Total Periods:45

EXPERIENTIAL LEARNING

1. Give a training needs analysis case and ask the students to find out the Knowledge needs
2. Implement various Knowledge methods, observe and submit a report on its effectiveness.
3. The case studies will be collected as Assignments and the same will be evaluated.

RESOURCES

TEXT BOOKS:

1. Lance A Berger, Dorothy R Berger, The Talent and Knowledge Management Handbook, 2e, TMH, 2008.
2. Irma Becerra-Fernandez, Avelino Gonzalez, Rajiv Sabherwal, Knowledge Management: Challenges, Solutions, and Technologies, Pearson, 2009

REFERENCE BOOKS:

1. Sudhir Warier, Knowledge Management, Vikas, 2004
2. Ravinder Shukla, Talent and Knowledge Management: Process of Developing and Integrating Skilled Workers, Global India Publications, 2009.
3. Marshall Goldsmith, Louis Carter, Best Practices in Talent and Knowledge Management: How the World's Leading Corporations, Wiley, 2010.

VIDEO LECTURES:

1. <https://hbsp.harvard.edu/cases/KM>
2. <https://open.umn.edu/opentextbooks/textbooks/KM>

WEB RESOURCES:

1. <https://kpmg.com/in/en/home/services/learning-academy/course-Knowledge Management>
2. <https://www.citehr.com/>
3. <https://www.icmrindia.org>
4. <https://www.hr-guide.com>

PROGRAM ELECTIVE

Course Code	Course Title	L	T	P	S	C
25MG201035	LEADERSHIP AND TEAM BUILDING	3	-	-	-	3
Pre-Requisite	-					
Anti-Requisite	-					
Co-Requisite	-					

COURSE DESCRIPTION: To understand the qualities of a leader and the requirements of building and leading teams.

COURSE OUTCOMES: After successful completion of the course, students will be able to:

- CO1.** Restate the skills required for leader and able to know and handle the different situation and people
- CO2.** Describe the leadership skills and their development.
- CO3.** Interpret the contemporary leadership skills which increases job performance.
- CO4.** Identify the conflicts among team members and resolve them for increasing performance.
- CO5.** Determine the situation easily for making effective decision for enhancing organization growth.

CO-PO Mapping Table:

Course Outcomes	Program Outcomes						
	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	2	2	3	2	3	-	2
CO2	2	2	3	2	2	-	2
CO3	2	3	3	2	2	-	3
CO4	2	3	3	2	3	2	2
CO5	3	3	3	3	3	2	3
Course Correlation Mapping	2	3	3	2	3	2	2

Correlation Levels: **3: High; 2: Medium; 1: Low**

COURSE CONTENT

Module 1: LEADERSHIP (09 Periods)

-Understanding Leaders and Leadership – Need for Leadership – Leader and Manager – Prerequisites of Organizational Leaders: Self-management dimensions – Leading People – Task management; Myths and Realities of Leadership – Current Issues in Leadership-Inner Structure of Effective Leaders

Module 2: ATTRIBUTES OF LEADERS (09 Periods)

Concepts of Power and Authority –Types of Power – Sources of Power – Leadership Skills & their development – Leadership Traits – Intelligence and Leadership – Influencing Tactics – Influencing Processes - Self efficacy

Module 3: CONTEMPORARY LEADERSHIP (09 Periods)

Styles Transformational Leadership – Charismatic Leadership – Value Based Leadership – Spiritual Leadership - Servant Leadership – Level 5 Leadership.

Module 4: ESSENTIALS OF BUILDING AND MANAGING TEAMS (09 Periods)

Understanding Teams-Differentiating Groups and Teams-Types of Teams-Cross cultural teams-Shaping Team Behavior-Building a High-Performance Teams-Conflict: Conflict resolution mechanism.

Module 5: TEAM EFFECTIVENESS (09 Periods)

Determinants of Team Performance – Facilitating Team Building - Interpersonal Competence and Team Building - Team Effectiveness- Decision Making in Teams.

Total Periods:45

EXPERIENTIAL LEARNING

LIST OF EXPERIMENTS:

1. Give a training needs analysis case and ask the students to find out the training needs
2. Implement various training methods, observe and submit a report on its effectiveness.
3. The case studies will be collected as Assignments and the same will be evaluated.

RESOURCES

TEXT BOOKS:

1. Uday Kumar Haldar, Leadership and Team Building, Oxford University Press, New Delhi, 2010.
2. Charles R. Greer: Leadership Management- A General Managerial Approach, 2nd Edition, 7th Impression, Pearson Education, New Delhi, 2009.

REFERENCE BOOKS:

1. B. Rathan Reddy, Team Development & Leadership, 8th Impression, Jaico Publishing House, Mumbai, 2010.
2. Uma Jain, Uday Pareek, Madhukar Shukla: Developing Leadership for the Global Era, McMillan.
3. Peter G. Northouse, Leadership-Theory and Practice, 3rd Edition, Response Books, 2006

VIDEO LECTURES:

1. <https://hbsp.harvard.edu/cases/LTB>

WEB RESOURCES:

1. <https://kpmg.com/in/en/home/services/learning-academy/course-LeadershipManagement-professionals-training.html>
2. <https://www.citehr.com/>
3. <https://www.icmrindia.org>
4. <https://www.hr-guide.com>

PROGRAM ELECTIVE

Course Code	Course Title	L	T	P	S	C
25MG201036	STRATEGIC HUMAN RESOURCE MANAGEMENT	3	-	-	-	3
Pre-Requisite	Human Resource Management					
Anti-Requisite	-					
Co-Requisite	-					

COURSE DESCRIPTION: To understand the concept of SHRM Practices in a critical understanding of the relationship between the HR strategy and corporate strategies.

COURSE OUTCOMES: After successful completion of the course, students will be able to:

- CO1.** Understand HR as a critical success factor and the need for investing in HR.
- CO2.** Analyze corporate companies achieve success by ensuring linkage between HR strategy and business strategy.
- CO3.** Apply various approaches learnt to evaluating HRM function in his/her organization.
- CO4.** Understand the importance of strategic human resource Planning and Acquisition.
- CO5.** Analyze the importance of Work-Life balance and integration

CO-PO Mapping Table:

Course Outcomes	Program Outcomes						
	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	3	2	2	2	2	-	2
CO2	3	3	2	2	2	2	3
CO3	3	3	2	2	2	2	3
CO4	3	2	2	2	2	-	2
CO5	2	2	2	2	3	2	2
Course Correlation Mapping	3	2	2	2	2	2	2

Correlation Levels: **3: High; 2: Medium; 1: Low**

COURSE CONTENT

Module 1: INTRODUCTION **(09 Periods)**

Introduction– Definition – Components – HR as Assets – The VRIO Framework – The Investment Perspective of HR – Risks involved in investing in HR – Factors determining the investment orientation

Module 2: EVOLUTION OF SHRM **(09 Periods)**

Objectives of SHRM – Differences between HRM and SHRM – Link between HR strategy and Business strategy – **Strategic Fit:** A Conceptual Framework – Different Approaches to SHRM: Best Fit Approach, Configuration Approach – Best Practice Approach – HR Practices Life Cycle.

Module 3: HR ENVIRONMENT **(09 Periods)**

Environment Trends and HR challenges – HRM: A changing function – **HR Evaluation:** Definition and overview – Contemporary Approaches to HR Evaluation: Balanced Score Card – HR Score Card – Bench Marking – Business Excellence Model (BEM)

Module 4: HUMAN RESOURCE PLANNING **(09 Periods)**

Relationship between Business strategy, HR strategy and HRP: Classification by Porter - Classification by Miles and Snow; Significance of HRP – Macro HRP- Micro HRP – Objectives of HRP; **HR Acquisition:** New approaches to Recruitment Advantages and Disadvantages of Internet recruitment – Compensation system in the globalized environment.

Module 5: TRAINING AND DEVELOPMENT **(09 Periods)**

Significance – Special forms - New Developments – **Career Management:** An SHRM Approach – Work-life balance – Work-life Integration – Work-life Initiatives and their benefits – Strategic Approach to Work-life Integration.

Total Periods:45

EXPERIENTIAL LEARNING

1. Give a training needs analysis case and ask the students to find out the training needs
2. Implement various training methods, observe and submit a report on its effectiveness.
3. The case studies will be collected as Assignments and the same will be evaluated.

RESOURCES

TEXT BOOKS:

1. Agarwala, T. (2009). Strategic human resource management (7th impression). Oxford University Press.
2. Greer, C. R. (2009). Strategic human resource management: A general managerial approach (2nd ed., 7th impression). Pearson Education.

REFERENCE BOOKS:

1. Kesho Prasad: Strategic Human Resource Management – Text and Cases, McMillan, 2005.
2. Rajeesh Viswanathan: Strategic Human Resource Management, 1st Edition, Himalaya Publishing House, Mumbai, 2010.
3. Jeffrey A. Mello: Strategic HRM, Thomas Learning, New Delhi, 2002.

VIDEO LECTURES:

1. <https://hbsp.harvard.edu/cases/>

WEB RESOURCES:

1. <https://kpmg.com/in/en/home/services/learning-academy/course-shrm-development-professionals>
2. <https://www.citehr.com./>
3. <https://www.icmrindia.org>

PROGRAM ELECTIVE

Course Code	Course Title	L	T	P	S	C
25MG201037	PERFORMANCE MANAGEMENT	3	-	-	-	3
Pre-Requisite	-					
Anti-Requisite	-					
Co-Requisite	-					

COURSE DESCRIPTION: This course identifies the knowledge and skills needed for effective management of individual and team performance and examines the design of performance.

COURSE OUTCOMES: After successful completion of the course, students will be able to:

- CO1.** Understand the significance of Performance Management.
- CO2.** Understand the Communication of Performance Management to enhance employee performance.
- CO3.** Demonstrate Appraisal methods to meet individual and organizational strategic needs
- CO4.** Determine performance management and development of employees.
- CO5.** Demonstrate the reward system to increase productivity.

CO-PO Mapping Table:

Course Outcomes	Program Outcomes						
	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	3	2	2	2	2	-	2
CO2	2	2	2	2	3	-	2
CO3	3	3	2	2	3	2	3
CO4	3	3	2	2	3	2	3
CO5	2	3	2	2	3	2	3
Course Correlation Mapping	3	3	2	2	3	2	3

Correlation Levels: **3: High;** **2: Medium;** **1: Low**

COURSE CONTENT

Module 1: INTRODUCTION

(09 Periods)

Scope and Significance - Advantages of Performance Management - Performance management process - Performance Planning - Performance Appraisal - Performance Mentoring - Performance Management Strategic Planning.

Module 2: COMMUNICATION OF PERFORMANCE EXPECTATIONS

(09 Periods)

Job Description - Defining Performance and Choosing a measurement approach measuring results and Behaviors. Gathering performance Information – Presentation, Information and Taking Corrective action – Metrics- Types of Metrics - Critical Success Factors Indicators

Module 3: PERFORMANCE APPRAISAL METHODS

(09 Periods)

Traditional methods: Ranking, Grading, paired comparison method, critical incidents method. Modern Methods: Process MBO – process - 360-degree performance appraisal – Counselling, Human Resource Accounting, Assessment Centres.

Module 4: PERFORMANCE MANAGEMENT AND EMPLOYEE DEVELOPMENT

(09 Periods)

Performance Management Skills, performance Management Framework, Employee Assessment system, Role of HR Professionals in Performance management.

Module 5: REWARD MANAGEMENT

(09 Periods)

Job evaluation, Techniques of Job evaluation: Job rotation, Job Enlargement, and Job Enrichment; salary and wage fixation methods –Fringe benefits -Incentives and bonus systems –Maintenance of pay roll system.

Total Periods:45

EXPERIENTIAL LEARNING

1. Present the seminar on different methods of Performance Appraisal.
2. Different Case Studies Will be Given to students as per the topic that will be collected and evaluated.

RESOURCES

TEXT BOOKS:

1. Michael, Armstrong, "Performance Management". Kogan Page. London, 1999.
2. Chadha, P. "Performance Management: It's About Performing – Not Just Appraising". McMillan India Ltd. 2003.
3. Boyett.J.H and conn H.P "Maximizing performance Management", Glenbrdige publishing, oxford, 1995.

REFERENCE BOOKS:

1. Herman Aguinis, "Performance management", 3e, Pearson, 2014.
2. Prem Chadha, "Performance Management," Macmillan, 2012.
3. Soumendra Narian Bagchi, "Performance Management", 2e, Cengage Learning 2013.

VIDEO LECTURES:

1. <https://nptel.ac.in/courses/110105137>
2. <https://www.youtube.com/watch?v=Pkw5k4IWbnA&feature=youtu.be>

WEB RESOURCES:

1. <https://www.cipd.org/knowledge/factsheets/performance-management-factsheet/>
2. <https://employmenthero.com/blog/online-performance-management-tools/>
3. <https://www.recruiterslineup.com/top-10-online-employee-performance-management-sof>

Course Code	PROGRAM ELECTIVE	L	T	P	S	C
25MG201038	COMPENSATION MANAGEMENT	3	-	-	-	3
Pre-Requisite	-					
Anti-Requisite	-					
Co-Requisite	-					

COURSE DESCRIPTION: This Course is designed to provide the student with a thorough knowledge of various methods and practices of Compensation Management.

COURSE OUTCOMES: After successful completion of the course, students will be able to:

- CO1.** Understand the concept of Compensation Management and its approaches
- CO2.** Analyse the classification of compensation and the strategies of Compensation
- CO3.** Understand the preparation of a Wage Structure
- CO4.** Understand the factors influencing Performance based pay
- CO5.** Evaluate the importance of wage boards

CO-PO Mapping Table:

Course Outcomes	Program Outcomes						
	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	3	2	2	2	2	-	2
CO2	3	3	2	2	2	2	3
CO3	3	2	2	2	2	-	-
CO4	3	3	2	2	2	2	2
CO5	2	2	2	3	2	2	3
Course Correlation Mapping	3	2	2	2	2	3	2

Correlation Levels: **3: High;** **2: Medium;** **1: Low**

COURSE CONTENT

Module 1: COMPENSATION (09 Periods)

Definition - Compensation Responsibilities - Compensation System Design Issues - Compensation Philosophies - Compensation Approaches

Module 2: COMPENSATION CLASSIFICATION (09 Periods)

Compensation Classification - Types - Incentives - Fringe Benefits - Strategic Compensation Planning - Determining Compensation - The wage Mix - Development of Base Pay Systems - The Wage Curve - Pay Grades - Salary Matrix - Compensation as a Retention Strategy

Module 3: WAGE STRUCTURE (10 Periods)

Theories of Wages - Wage Fixation - Wage Payment - Salary Administration - Executive Compensation - Incentive Plans - Team Compensation - Gain Sharing Incentive Plan - Enterprise Incentive Plan - Profit Sharing Plan- ESOPs - Compensation Management in Multi-National organizations.

Module 4: PERFORMANCE BASED PAY SYSTEMS (09 Periods)

Methods of Rewarding of Sales Personnel - Pay - Commission - Pay and Commission - Performance Based Pay Systems - Incentives - Executive Compensation Plan and Packages - Perceptions of Pay Fairness - Legal Constraints on Pay Systems.

Module 5: WAGE BOARDS (08 Periods)

Pay Commissions - Employee Benefits - Benefits Need Analysis - Funding Benefits - Benchmarking Benefit Schemes - Employee Benefit Programmes - Security Benefits - Creating a Work Life Setting - Designing Benefit Packages

Total Periods:45

EXPERIENTIAL LEARNING

1. Present the seminar on different methods of Compensation Methods.
2. Different Case Studies Will be Given to students as per the topic that will be collected and evaluated.

RESOURCES

TEXT BOOKS:

1. Richard Thrope & Gill Homen, STRATEGIC REWARD SYSTEMS, Prentice Hall India, New Delhi
2. Michael Armstrong & Helen Murlis, HAND BOOK OF REWARD MANAGEMENT, Crust Publishing House.

REFERENCE BOOKS:

1. Dewakar Goel, PERFORMANCE APPRAISAL AND COMPENSATION MANAGEMENT, PHI Learning, New Delhi.
2. Richard.I. Henderson, COMPENSATION MANAGEMENT IN A KNOWLEDGE BASED WORLD, Prentice Hall India, New Delhi

VIDEO LECTURES:

- 1 <https://nptel.ac.in/courses/110105137>
- 2 <https://www.digimat.in/nptel/courses/video/122108038/L27.html>

WEB RESOURCES:

- 1 <https://www.igntu.ac.in/eContent/IGNTU-eContent-638670815118-MBA-TourismandTravelManagement-2-RohitRaviundraBorlikar-MBAT201-OBHRM-3.pdf>
- 2 <https://sircrrpgcourses.ac.in/admin/uploads/3119Final-24-08-2020-compensation%20management.2.0-Unit-I-MrsVViswasanthi.pdf>

PROGRAM ELECTIVE

Course Code	Course Title	L	T	P	S	C
25MG201039	LEARNING AND DEVELOPMENT	3	-	-	-	3
Pre-Requisite	-					
Anti-Requisite	-					
Co-Requisite	-					

COURSE DESCRIPTION: To understand the concept of Learning with emphasis on training and Development and its role in organizational Development

COURSE OUTCOMES: After successful completion of the course, students will be able to:

- CO1.** Understand L&D practices and apply them effectively in the real time business to increase productivity.
- CO2.** Understand the concepts of learning and development and its role.
- CO3.** Learn various contemporary methods of learning and development.
- CO4.** Gain insights of various training evaluation methods and career planning.
- CO5.** Develop students with career management systems.

CO-PO Mapping Table:

Course Outcomes	Program Outcomes						
	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	3	3	2	2	2	-	3
CO2	3	2	2	2	2	-	2
CO3	3	3	2	2	2	-	3
CO4	3	3	2	2	2	2	3
CO5	3	2	3	2	3	-	1
Course Correlation Mapping	3	1	-	1	1	-	-

Correlation Levels: *3: High; 2: Medium; 1: Low*

COURSE CONTENT

Module 1: INTRODUCTION TO EMPLOYEE LEARNING AND DEVELOPMENT (09 Periods)

Learning, Meaning and significance, The Forces Influencing Working and Learning, classification of learning capabilities, Learning theories- Reinforcement Theory, Social Learning Theory, The Learning Process, The Learning Cycle.

Module 2: LEARNING AND TRAINING (09 Periods)

Introduction, Relationship, meaning, Designing Effective Training, Forces influencing working & learning, Strategic Training, Work Environment, Characteristics influencing transfer of training, organizational environments encouraging transfer.

Module 3: LEARNING/TRAINING NEEDS ANALYSIS (09 Periods)

Meaning and significance of training needs, types of needs, Meaning and significance of training design and development, principles of training design, design process, identifying the training objectives, determining structure, content, duration, method, learning activities

Module 4: LEARNING IMPLEMENTATION & METHODS (09 Periods)

Meaning and significance of implementation, making or buying decision, implementation process for making and buying decisions, skills of effective trainer.

Module 5: CONTEMPORARY ISSUES IN TRAINING AND DEVELOPMENT (09 Periods)

Orientation training, diversity training, team-training, cross cultural training, training for talent management and competency mapping. Career Management, Career paths, Coping with career breaks, Training for virtual work arrangements

Total Periods:45

EXPERIENTIAL LEARNING

LIST OF EXPERIMENTS:

1. Give a training needs analysis case and ask the students to find out the training needs
2. Implement various training methods, observe and submit a report on its effectiveness.
3. The case studies will be collected as Assignments and the same will be evaluated.

RESOURCES

TEXT BOOKS:

1. Effective Training, P Nick and Blanchard, 2nd Edition, Pearson Education/PHI, 2005.
2. Management Training and Development, Gupta B.L, 1st Edition, Vrinda Publications, 2011.
3. Employee Learning/Training & Development, Noe A Raymond, 2nd edition, McGraw Hill Publication, 2011

REFERENCE BOOKS:

1. Training for development- Rolf Lynton &UdaiPareek, Sage Publications, 2011.
2. Effective HR Training Development Strategy – Ratan Reddy, HPH, 2005.
3. Training in organizations - Goldstein, 4th Edition, Cengage learning.

VIDEO LECTURES:

1. <https://www.youtube.com/watch?v=KlpsKLVgUgI>
2. <https://www.youtube.com/watch?v=pi4ZVfHyUNC>

WEB RESOURCES:

1. <https://www.forbes.com/sites/deniserestauri/2017/05/17/how-this-boss-learned-a-big-lesson-and-is-making-noise/#70fe30c1a78f>
2. <https://www.citehr.com/>
3. <https://www.icmrindia.org>

PROGRAM ELECTIVE

Course Code	Course Title	L	T	P	S	C
25MG201040	INTERNATIONAL HUMAN RESOURCE MANAGEMENT	3				3
Pre-Requisite	Human Resource Management					
Anti-Requisite						
Co-Requisite						

COURSE DESCRIPTION: This course introduces the principles and practices of International Human Resource Management (IHRM), focusing on global staffing, expatriate training, performance management, and compensation. It emphasizes the strategic role of IHRM in supporting multinational corporations and managing a diverse international workforce effectively.

COURSE OUTCOMES: After successful completion of the course, students will be able to:

- CO1.** To Gain an overview of the nature, scope and importance of International Human Resource Management
- CO2.** To Understand and appreciate the role of International Human Resource Management in development and execution of strategies for success of multinational corporations
- CO3.** Learn the role of International Human Resource Management in long-term planning and staffing of manpower globally
- CO4.** To Gain insights of the strategic role of Training and Development of Expatriates in management of international assignments.
- CO5.** To Acquaint themselves with the process of global performance management and understand the complexities of global compensation

CO-PO Mapping Table:

Course Outcomes	Program Outcomes						
	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	3	1	-	1	1	-	-
CO2	3	1	-	1	1	-	-
CO3	3	1	-	1	1	-	-
CO4	3	1	-	1	1	-	-
CO5	3	1	-	1	1	-	-
Course Correlation Mapping	3	1	-	1	1	-	-

Correlation Levels: **3: High; 2: Medium; 1: Low**

COURSE CONTENT

Module 1: INTRODUCTION AND OVERVIEW (09 Periods)

Importance to International HRM, Difference between Domestic and International Manager, Key Perspective in Global Workforce Management, Cultural Foundations of International Human resource Management, Cross Culture Differences in Workplace

Module 2: ROLE OF INTERNATIONAL HRM IN MNC'S (09 Periods)

Global Leadership, Strategic Control Needs, Competitive Strategy of Multinational Corporations, Linking Human Resource Management Practices to Competitive Strategy and Organization Structure

Module 3: GLOBAL STAFFING (09 Periods)

Global Recruitment of Human Resources, Global Selection of Human Resources, General Factors Affecting Global Staffing and Challenges.

Module 4: GLOBAL TRAINING AND DEVELOPMENT (09 Periods)

Strategic Role of Training and Development in the Global Market Place, Fundamental Concepts and Principles for Guiding Global Training and Development.

Module 5: COMPENSATION FOR A GLOBAL WORKFORCE (09 Periods)

Objectives of International Compensation Management, Complexities in International Compensation Management, Factors that affect International Compensation, Components and Structure of International Compensation Package.

Total Periods:45

EXPERIENTIAL LEARNING

1. Present the seminar on different Global Practices Followed by the Companies
2. The Students have to look at various MNC's and their Practices to present in the class to enrich knowledge.
3. Different Case Studies Will be Given to students as per the topic that will be collected and evaluated.

RESOURCES

TEXT BOOKS:

1. Srinivas R Kandula, International Human Resource Management, Sage, 4e, 2018.
2. Anne-Wil Harzing and Ashly H. Pinnington, International Human Resource Management, Sage Publications, 4e, 2017.
3. S.C. Gupta, International Human Resource Management, McMillan, 2e, 2017.

REFERENCE BOOKS:

1. Charles M Vance and Yongsunpaik, Managing Global Work force, PHI, 3e, 2015.
2. Tony Edwards and Chris Rees: International Human Resource Management, Pearson, 2009.
3. Peter Dowling, International Human Resource Management: Managing People in a Multinational Context, Thomson, 5e, 2008.

VIDEO LECTURES:

1. <https://www.youtube.com/watch?v=K1psKLVgUgI>
2. <https://www.youtube.com/watch?v=pi4ZVfHyUNC>

WEB RESOURCES:

1. <https://www.youtube.com/watch?v=bdXffr0UYG4>
2. <https://www.forbes.com/sites/deniserestauri/2017/05/17/how-this-boss-learned-a-big-lesson-and-is-making-noise/#70fe30c1a78f>

PROGRAM ELECTIVE

Course Code	Course Title	L	T	P	S	C
25MG201041	ORGNAIZATIONAL DEVELOPMENT	3	-	-	-	3
Pre-Requisite	-					
Anti-Requisite	-					
Co-Requisite	-					

COURSE DESCRIPTION: This course emphasizes the theories and practices of managing change and the Organizational development Process. This course examines the forces that have been driving organizations to change and development, explore the dimensions of change and the approaches of the developmental process.

COURSE OUTCOMES: After successful completion of the course, students will be able to:

- CO1**. Understand organizational change and resistance to change at various levels
- CO2.** Provide knowledge of the theories and models of organizational changes
- CO3.** Understand the organizational development and various theories of OD
- CO4.** Develop intervention strategies
- CO5.** Develop skills in organizational analysis through different diagnostic approaches

CO-PO Mapping Table:

Course Outcomes	Program Outcomes						
	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	3	1	-	1	1	-	-
CO2	3	1	-	1	1	-	-
CO3	3	1	-	1	1	-	-
CO4	3	1	-	1	1	-	-
CO5	3	1	-	1	1	-	-
Course Correlation Mapping	3	1	-	1	1	-	-

Correlation Levels: **3: High;** **2: Medium;** **1: Low**

COURSE CONTENT

Module 1: ORGANIZATION CHANGE

(09 Periods)

Introduction to Organization Change: meaning and nature of Organization Change. Forces of change types of organizational change, Resistance to Change at individual and organizational level.

Module 2: MODELS OF ORGANIZATIONAL CHANGE

(09 Periods)

Lewin Model of Organization change, McKinsey 7 S Model, Kotter's Model, Burke – Litwin Model, Work Redesign Model, ADKAR Model, Bridges' Transition Model and Grief Model

Module 3: ORGANIZATION DEVELOPMENT

(09 Periods)

Concept, Nature and Scope of O.D.; Process of O.D.; Underlying Assumptions & Values; Foundations of OD: Action Research, Survey Feedback, Systems Theory, Participation and Empowerment.

Module 4: O.D. INTERVENTIONS

(09 Periods)

Team Interventions, Inter-group Interventions, Personal, Interpersonal and group process interventions, Structural Interventions.

Module 5: IMPLEMENTATION AND ASSESSMENT OF O.D

(09 Periods)

Implementation – conditions for failure and success in O.D. Efforts. Some key considerations and issues in OD.

Total Periods: 45

EXPERIENTIAL LEARNING

1. Case Studies on Organization change and development, Teamwork.
2. Presentations on various interventions by the students, Quiz after every module.
3. PPT on Different models of Organizational change in different companies.

RESOURCES

TEXTBOOKS:

- 1 Kotler, P., & Keller, K. L. (2010). Marketing management (15th ed.). Pearson.
- 2 Rao, K. V. (2015). Product & brand management: Text & cases. Himalaya Publishing.

REFERENCE BOOKS:

- 1 Majumdar, R. (2010). Product management in India. PHI Learning.
- 2 Chunawalla, S. A. (2014). Compendium of brand management. Himalaya Publishing.
- 3 Verma, H. V. (2000). Brand management: Text & cases. Excel Books.

VIDEO LECTURES:

- 1 https://onlinecourses.nptel.ac.in/noc22_mg82/preview
- 2 <https://archive.nptel.ac.in/courses/110/107/110107161/>

WEB RESOURCES:

- 1 https://ebooks.ipude.in/management/mba/term_4/DMGT508_PRODUCT_AND_BRAND_MANAGEMENT_T.pdf
- 2 <https://www.ddegjust.ac.in/studymaterial/mba/mm-408.pdf>
- 3 <https://www.studocu.com/in/document/xim-university/business-management/product-brand-management-notes-for-management-students/25175362>

PROGRAM ELECTIVE

Course Code	Course Title	L	T	P	S	C
25MG201042	STRESS MANAGEMENT	3	-	-	-	3
Pre-Requisite	-					
Anti-Requisite	-					
Co-Requisite	-					

COURSE DESCRIPTION: This course aims to teach the student how to limit the harmful effects of stress while maintaining life's quality and vitality.

COURSE OUTCOMES: After successful completion of the course, students will be able to:

- CO1.** Understand personal, environmental, and organizational causes of stress
- CO2.** Analyze the stress issues related to diverse ethnic populations
- CO3.** Understand the Behavioural aspects of the stress
- CO4.** Understand the relationship of stress and Work performance
- CO5.** Evaluate the strategies of stress management and career counselling.

CO-PO Mapping Table:

Course Outcomes	Program Outcomes						
	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	3	1	-	1	1	-	-
CO2	3	1	-	1	1	-	-
CO3	3	1	-	1	1	-	-
CO4	3	1	-	1	1	-	-
CO5	3	1	-	1	1	-	-
Course Correlation Mapping	3	1	-	1	1	-	-

Correlation Levels: **3: High;** **2: Medium;** **1: Low**

COURSE CONTENT

Module 1: INTRODUCTION TO STRESS MANAGEMENT (09 Periods)

Meaning and nature of stress, Sources of stress (Neuro-endocrinology, personality, environment, intrapersonal and interpersonal sources of stress), Consequences of stress, Stressful Behaviour and Health Status- somatic and anxiety problems, Theoretical models of Stress

Module 2: COGNITIVE APPRAISAL OF STRESS (09 Periods)

General adaptation to stress; Consequences of stress; Physiological and psychological changes associated with the stress response. Stress and Memory; Stress and Other Cognitive Variables; Stressful environmental conditions on performance.

Module 3: BEHAVIOURAL ASPECTS OF STRESS (10 Periods)

Behavioural aspects of Stress: Adaptive and Maladaptive Behaviour; Individual and Cultural Differences: Sources of Stress- Across the Lifespan; College and Occupational Stress

Module 4: STRESS AND WORK PERFORMANCE (09 Periods)

Role of communication in managing stress and work performance: Emotional regulation and coping; Emotional intelligence and conflict management: Emotional Basis and Stress; Stress and Conflict in Relationships.

Module 5: STRESS AND COPING, ASSESSMENT MANAGEMENT AND COUNSELING TECHNIQUES (08 Periods)

Prevention of stress Challenging Stressful Thinking; Problem Solving; Emotional and cognitive coping styles: Strategies of Synthesis and Prevention: Resilience and Stress; Optimal functioning; Making changes last; Small changes and large rewards.

Total Periods:45

EXPERIENTIAL LEARNING

1. Give a training needs analysis case and ask the students to find out the Stress Causes
2. Implement various stress bursters, observe and submit a report on its effectiveness.
3. The case studies will be collected as Assignments and the same will be evaluated.

RESOURCES

TEXT BOOKS:

1. Bramer, L. M., & Shostrom, E. L. (1982). Therapeutic psychology: Fundamentals of counseling and psychotherapy. Prentice Hall.
2. Barlow, D. H., Rapee, R. M., & Perini, S. (2014). 10 steps to mastering stress: A lifestyle approach. [Publisher info if available].
3. Chen, D. D. (2017). Stress management and prevention: Applications to daily life (3rd ed.). Taylor & Francis.

REFERENCE BOOKS:

1. Clayton, M. (2011). Brilliant stress management: How to manage stress in any situation (1st ed.). Pearson Education.
2. Roy, S. (2012). Managing stress. Sterling Publications.

VIDEO LECTURES:

1. https://onlinecourses.nptel.ac.in/noc19_ge26/preview
2. <https://archive.nptel.ac.in/courses/121/105/121105009/>

WEB RESOURCES:

1. <https://www.uakron.edu/armyrotc/MS1/14.pdf>
2. <http://www.gov.pe.ca/photos/original/StressManage.pdf>

PROGRAM ELECTIVE

Course Code	Course Title	L	T	P	S	C
25MG201043	Applications of AI in HRM	3	-	-	-	3
Pre-Requisite	-					
Anti-Requisite	-					
Co-Requisite	-					

COURSE DESCRIPTION: This course explores the transformative impact of Artificial Intelligence (AI) across the core functions of Human Resource Management (HRM). It covers AI-driven tools, algorithms, and strategies used in talent acquisition, employee engagement, performance management, retention, and strategic HR decision-making. Through a blend of conceptual understanding and real-world applications, students will learn how AI enhances HR operations, supports data-driven decisions, and shapes the employee experience. The course also critically examines ethical, legal, and social implications associated with integrating AI into HR practices, including bias mitigation and data privacy. Students will engage with practical case studies, hands-on tool demonstrations, and discussions on current and emerging trends such as generative AI, sentiment analysis, and predictive analytics in workforce planning. By the end of the course, students will be equipped to evaluate, recommend, and strategically implement AI solutions to support organizational HR goals.

COURSE OUTCOMES: After successful completion of the course, students will be able to:

- CO1.** Understand key AI concepts relevant to HRM.
- CO2.** Identify and explain AI applications in recruitment, engagement, performance, and retention.
- CO3.** Analyse HR data using AI-driven insights for strategic decisions.
- CO4.** Evaluate ethical, legal, and practical challenges of using AI in HR.
- CO5.** Propose AI-based solutions to address HR challenges in organizations.

CO-PO-PSO Mapping Table:

Course Outcomes	Program Outcomes						
	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	3	1	-	1	1	-	-
CO2	3	1	-	1	1	-	-
CO3	3	1	-	1	1	-	-
CO4	3	1	-	1	1	-	-
CO5	3	1	-	1	1	-	-
Course Correlation Mapping	3	1	-	1	1	-	-

Correlation Levels: **3: High;** **2: Medium;** **1: Low**

COURSE CONTENT

Module 1: INTRODUCTION TO AI AND ITS ROLE IN HRM (05 Periods)

Understanding AI: Machine learning, NLP, predictive analytics, HR digital transformation
Benefits and challenges of AI adoption in HR, Ethical considerations and bias in AI systems

Module 2: AI IN TALENT ACQUISITION & RECRUITMENT (10 Periods)

AI-powered applicant tracking systems (ATS), Resume screening & candidate ranking,
Chatbots for candidate engagement, Video interview analysis and facial/emotional recognition

Module 3: AI IN EMPLOYEE ENGAGEMENT & EXPERIENCE (10 Periods)

Personalized learning and development (AI-driven LMS), Virtual assistants and chatbots for
HR queries, Sentiment analysis of employee feedback, AI for designing personalized career
paths

Module 4: AI IN PERFORMANCE MANAGEMENT AND RETENTION (10 Periods)

Predictive analytics to identify high risk employees, Continuous performance monitoring &
real-time feedback, AI-supported 360-degree reviews, Dynamic goal setting and alignment
tools

Module 5: AI IN HR ANALYTICS & STRATEGIC HRM (10 Periods)

Workforce planning and optimization, Predictive HR analytics for decision making,
Diversity and inclusion analytics, Future trends: Generative AI, robotics & HR automation

Total Periods:45

EXPERIENTIAL LEARNING

LIST OF EXPERIMENTS:

1. Case Study Analysis
Analyze real-world case studies of companies (e.g., Unilever, IBM, Deloitte) that adopted AI in HR.
Discuss: Objectives and tools used, Challenges faced, Ethical considerations, Measurable outcomes
2. Hands-on Tools and Simulations
Use demo versions of AI-powered HR software (e.g., HireVue, Leena AI, IBM Watson Talent, SAP SuccessFactors).
Students can: Simulate resume screening and candidate ranking, Experiment with AI-based chatbots responding to employee queries, use sentiment analysis tools to analyze sample employee feedback datasets.
3. Industry Expert Session / Guest Lecture
Invite HR tech startup founders, AI consultants, or CHROs using AI tools.
Students prepare questions on ethics, ROI, practical adoption.

RESOURCES

TEXT BOOKS:

- 1 Ben Eubanks (2018). Artificial Intelligence for HR: Use AI to Support and Develop a Successful Workforce. Kogan Page Publishers, 2018
- 2 Strohmeier, Stefan (2022). Handbook of Research on Artificial Intelligence in Human Resource Management. Edward Elgar Publishing, 2022

REFERENCE BOOKS:

- 1 Wolfgang Ertel, Introduction to Artificial Intelligence, Springer, 2nd Edition, 2018
- 2 Gary Dessler, Human Resource Management, Pearson, Latest Edition
- 3 De Lazzer, Gualtieri & Micera (Eds.), Handbook of Research on Artificial Intelligence in Human Resource Management, IGI Global, 2022
- 4 Martin Edwards & Kirsten Edwards, Predictive HR Analytics: Mastering the HR Metric , Kogan Page, 2016

VIDEO LECTURES:

1. https://onlinecourses.nptel.ac.in/noc25_mg05/preview

WEB RESOURCES:

1. <https://www.teamsense.com/blog/ai-applications-in-hr>
2. <https://www.veritone.com/blog/ai-for-hr/>
3. <https://www.vktr.com/ai-disruption/5-ai-case-studies-in-hr/>

PROGRAM ELECTIVE

Course Code:	Course Title	L	T	P	S	C
25MG201044	SALES AND RETAIL MANAGEMENT	3	-	-	-	3
Pre-Requisite	-					
Anti-Requisite	-					
Co-Requisite	-					

COURSE DESCRIPTION: This course is designed to provide the learner a good understanding of the concepts, strategies, and trends associated with the sales and retail operations. To help the learner to explore the current sales and retail environment, sales force and strategies in retail management, trends in retailing.

COURSE OUTCOMES: After successful completion of the course, students will be able to:

- CO1.** To provide an overview of Sales.
- CO2.** To understand the Strategies of Negotiation and brand identity.
- CO3.** To buildup sales organization and understanding the sales force.
- CO4.** To Illustrate about Retailing, and identification of store location and site selection.
- CO5.** To discriminate the importance of retail stores and operations management.

CO-PO Mapping Table:

Course Outcomes	Program Outcomes						
	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	3	1	1	1	1	-	-
CO2	3	1	1	1	1	-	-
CO3	3	1	1	1	1	-	-
CO4	3	1	1	1	1	-	-
CO5	3	1	1	1	1	-	-
Course Correlation Mapping	3	1	1	1	1	-	-

Correlation Levels: **3: High;** **2: Medium;** **1: Low**

COURSE CONTENT

Module 1: INTRODUCTION TO SALES MANAGEMENT (05 Periods)

Meaning, evaluation, importance, personal selling and emerging trends in sales management, elementary study of sales organizations, qualities and responsibilities of sales manager. Types of sales organizations.

Module 2: SELLING SKILLS AND SELLING STRATEGIES (10 Periods)

Selling and business styles, selling skills, situations, selling process, sales presentation, handling customer objectives, Negotiation Strategies, conflicts and dispute resolution, negotiation and discussion stages.

Module 3: MANAGEMENT OF SALES TERRITORY AND QUOTA (10 Periods)

Sales territory, meaning, size, Designing, sales quota, procedure, types, methods of setting sales quota. Recruitment and selection of Sales force, motivation & compensation, designing incentives and contests, Building sales reporting mechanism and monitoring, Sales force productivity.

Module 4: INTRODUCTION TO RETAILING (10 Periods)

Factors Influencing Retailing, Strategic Retail Planning Process, Retail Models and Theory of Retail Development, Modern retail formats in India, Store Location& Site Selection: Trading Area Analysis, Types of Location, Location and Site Evaluation, Objectives of Good store Design

Module 5: RETAIL STORE AND OPERATIONS MANAGEMENT (10 Periods)

Store Layouts, space planning and types of layouts, Visual Merchandising Techniques, Controlling Costs and Reducing Inventory Loss, Parking Space Problem at Retail Centers, Store Security, Store Record and Accounting System, Coding System, Material Handling in Stores, Logistic and Information system, Promotion, CRM & Brand Management in retailing.

Total Periods:45

EXPERIENTIAL LEARNING

LIST OF EXPERIMENTS:

1. Make a list of five of your favorite retail stores and evaluate reasons that have positively contributed towards their likeability.
2. Visit a supermarket and assess its various functions.
3. Give a seminar on CRM and submit a report.

RESOURCES

TEXT BOOKS

- 1 Still, R. R., Cundiff, E. W., & Govani, N. A. P. Sales management. Pearson Education.
- 2 Venugopal, P. Sales and distribution management. SAGE Publishing.
- 3 Levy, M., Weitz, B., & Grewal, D. Retailing management. McGraw-Hill.

REFERENCE BOOKS

- 1 Berman, Evans, Retail Management Strategic approach, Pearson
- 2 Chaudhary Prashant , Selling and Negotiation, SAGE Publishing
- 3 Tapan Panda: Sales and Distribution Management, OUP.
- 4 Pradhan Swapna; Retailing Management; McGraw-Hill Education
- 5 Havaldar, K.K., and Cavale, V.M.; Sales and Distribution Management; McGraw- Hill Education.

VIDEO LECTURES

- 1 <https://www.udemy.com/course/diploma-in-retail-management/>

WEB RESOURCES

1. <https://www.studocu.com/in/document>
2. <https://www.scribd.com/document/163893632/Mba-III-sales-Retail-Management-10mbamm312-Notes>
3. <https://www.tutorialsduniya.com/notes/retail-management-notes/>

PROGRAM ELECTIVE

Course Code	Course Title	L	T	P	S	C
25MG201045	CONSUMER BEHAVIOUR	3	-	-	-	3
Pre-Requisite						
Anti-Requisite						
Co-Requisite						

COURSE DESCRIPTION: The objective of the course is to enable students to understand the perspectives of consumers and their buying behavior. To get an insight into the consumer psychological processes in pre-purchase, purchase and post purchase situations. To evolve Marketing strategies based on Consumer Insights derived from purchase situations.

COURSE OUTCOMES: After successful completion of the course, students will be able to:

- CO1.** To explain concept of consumer behavior and different facets of consumer buying behavior.
- CO2.** To Analyze and interpret the consumer behavior and its relationship with different environment factors.
- CO3.** To Understand and describe consumer decision process pre -purchase and post purchase as well as repeat purchase behavior.
- CO4.** To Apply Consumer Behavior strategies by understanding customers' preferences for the long-term sustainability of the Organizations.
- CO5.** To Design contemporary issues of the marketing in the present scenario.

CO-PO Mapping Table:

Course Outcomes	Program Outcomes						
	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	3	1	-	1	1	-	-
CO2	3	1	-	1	1	-	-
CO3	3	1	-	1	1	-	-
CO4	3	1	-	1	1	-	-
CO5	3	1	-	1	1	-	-
Course Correlation Mapping	3	1	-	1	1	-	-

Correlation Levels: **3: High;** **2: Medium;** **1: Low**

COURSE CONTENT

Module 1: INTRODUCTION TO CONSUMER BEHAVIOR (09 Periods)

Introduction to consumer behavior: Understanding consumers and market segments. Consumer behavior and marketing strategy, Psychographic Dimensions-consumer motivation, Perception, personality, Information processing, Attitude formation and attitude change.

Module 2: ENVIRONMENTAL INFLUENCES (09 Periods)

Environmental influences on Consumer Behaviour -Social and Cultural Environment : Economic, Demographic, Cross Cultural and socio- cultural influences, Social Stratification, Reference Groups and family influences, personal influence

Module 3: CONSUMER DECISION MAKING PROCESS. (09 Periods)

Consumer Behaviour and Marketing Action - An overview - Consumer involvement - Decision-making processes - High and Low Involvement, Pre-purchase processes, Purchase ,post purchase process,- Consumer Behaviour Models - Howard -Sheth Model, EKB Model, Webster and Wind Model

Module 4: STRATEGIC MARKETING APPLICATIONS & CONSUMERISM (09 Periods)

Strategic marketing applications - Market segmentation strategies - Positioning strategies for existing and new products, Re-positioning, Perceptual Mapping - Marketing communication - Store choice and shopping behavior - Consumerism - Consumer rights Consumer protection Act 1986, Consumer disputes Redressal agencies and Commission and Marketers' responsibilities.

Module 5: GLOBAL CONSUMER BEHAVIOUR (09 Periods)

The Global Consumer Behavior and Online buying behavior - Consumer buying habits and perceptions of emerging non-store choices - Research and applications of consumer responses to direct marketing approaches - Issues of privacy and ethics.

Total Periods:45

EXPERIENTIAL LEARNING

LIST OF EXPERIMENTS:

1. Prepare Consumer Behavior Strategies
2. Prepare Consumer Behavior Posters
3. Design and Demonstrate Advertising strategies (promotional Activity)
4. Create Product Brand Image and Loyalty

RESOURCES

TEXT BOOKS:

1. Schiffman, L., & Kanuk, L. (2010). Consumer behavior (10th ed.). Pearson Prentice Hall.
2. Solomon, M. (2013). Consumer behavior: Buying, having, and being (13th ed.). Pearson.

REFERENCE BOOKS:

1. Assael, H. (2005). Consumer behavior: A strategic approach (Indian ed., 2003). Dreamtech
2. Gupta, S. L., & Pal, S. (2011). Consumer behaviour: An Indian perspective – Text & cases. Sultan Chand & Sons.
3. Schiffman, L. G., & Kanuk, L. L. (2010). Consumer behaviour. PHI Learning.
4. Nair, S. R. (2004). Consumer behaviour in Indian perspective. Himalaya Publishing House.
5. Mehta, S. (1973). Indian consumers: Studies and cases for marketing decisions. Tata McGraw-Hill Publishing Company.

VIDEO LECTURES:

1. <https://www.youtube.com/watch?v=DE077z2kxVk>
2. <https://www.youtube.com/watch?v=FmqYLM-c2s4>

WEB RESOURCES:

1. <https://www.sana-commerce.com/blog/what-is-the-role-of-customer-relationship-management-in-e-commerce/>
2. https://en.wikipedia.org/wiki/Customer_relationship_management

PROGRAM ELECTIVE

Course Code	Course Title	L	T	P	S	C
25MG201046	CUSTOMER RELATIONSHIP MANAGEMENT	3	-	-	-	3
Pre-Requisite	-					
Anti-Requisite	-					
Co-Requisite	-					

COURSE DESCRIPTION: This course deals with familiarizing the students with emerging trends in customer relations in the Indian Business and effectively managing the relations to increase customer loyalty.

COURSE OUTCOMES: After successful completion of the course, students will be able to:

- CO1.** Realize that customer relations change the business opportunities
- CO2.** Apply CRM concepts in different business markets
- CO3.** Gain knowledge to use appropriate technological tools for CRM
- CO4.** Manage and implement customer-centric marketing opportunities
- CO5.** Assess the impact of channels on CRM.

CO-PO-PSO Mapping Table:

Course Outcomes	Program Outcomes						
	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	3	1	-	1	1	-	-
CO2	3	1	-	1	1	-	-
CO3	3	1	-	1	1	-	-
CO4	3	1	-	1	1	-	-
CO5	3	1	-	1	1	-	-
Course Correlation Mapping	3	1	-	1	1	-	-

Correlation Levels: **3: High;** **2: Medium;** **1: Low**

COURSE CONTENT

Module 1: INTRODUCTION TO RURAL MARKETING (09 Periods)

CRM- meaning definition - importance - Features of good CRM programme - Implementing CRM initiatives - Role of CRM in improving Customer relationships - - Advantages of CRM - Steps for successful CRM - CRM system, selection and implementation process.

Module 2: UNDERSTANDING THE RURAL CONSUMER (09 Periods)

Service quality themes in CRM - CRM in services (Hospitality, Telecom, Banking, Airlines, Insurance, travel and tourism, Transportation and Logistics)-CRM in product markets.

Module 3: MARKETING MIX IN RURAL MARKETING (10 Periods)

Components of ECRM solutions - Data mining and CRM - Campaign management- Sales force automation- Customer service and support- -Evaluating technological Solutions for CRM.

Module 4: INNOVATION IN RURAL MARKETING (09 Periods)

Defining CRM strategy - CRM implementation Road map - Customer centric marketing and processes - Issues in implementing a technology solution for CRM -Budgeting for attraction VS retention-Customer retention plans-Evaluating retention programmes.

Module 5: FUTURE OF RURAL MARKETING (08 Periods)

Importance of channels for CRM -Role of traditional channels in CRM-Key factors affectin CRM- Major challenges facing CRM through traditional channels - Emerging channel trend that impact CRM - Recent opportunities and challenges for CRM.

Total Periods:45

EXPERIENTIAL LEARNING

1. Collect various cases relating to CRM and discuss the same with different teams with different contexts and experience their learning and writing assignments.
2. Present Videos how CRM plays a vital role in an organizations to enhance the revenue and customer network for an organization.
3. Giving assignments to students to write observations on recent CRM issues how companies are playing effective retention strategies to retain customers with an excellent relationship.

REFERENCES

TEXT BOOKS:

1. Buttle, F. (2009). Customer Relationship Management: Concepts and Technologies. Routledge.
2. Berndt, A., & Galland, M. F. (2012). Customer Relationship Management: Integrating Marketing Strategy and Information Technology. Wiley.

REFERENCE BOOKS:

1. Kumar, V., & Reinartz, W. (2018). Customer Relationship Management: A Databased Approach. Wiley.
2. Peppers, D., & Rogers, M. (2016). Managing Customer Relationships: A Strategic Framework (3rd ed.). Wiley.

VIDEO LECTURES:

1. <https://www.youtube.com/watch?v=DE077z2kxVk>
2. <https://www.youtube.com/watch?v=FmqYLM-c2s4>

WEB RESOURCES:

1. <https://www.tutorialsduniya.com/>
2. https://en.wikipedia.org/wiki/Customer_relationship_management

PROGRAM ELECTIVE

Course Code	Course Title	L	T	P	S	C
25MG201047	MARKETING OF SERVICES	3	-	-	-	3
Pre-Requisite	-					
Anti-Requisite	-					
Co-Requisite	-					

COURSE DESCRIPTION: To appreciate the challenges involved in managing the services and analyse the strategies to deal with these challenges. To give insights about the foundations of services marketing, customer expectations of services and gap existing in the service delivery processes and service Quality

COURSE OUTCOMES: After successful completion of the course, students will be able to:

- CO1.** To provide an overview of services. Demonstrate an extended understanding of the similarities and differences in service-based and physical product-based marketing activities
- CO2.** Develop and justify marketing planning and control systems appropriate to service-based activities.
- CO3.** Demonstrate integrative knowledge of marketing issues associated with service productivity, perceived quality, customer satisfaction and loyalty
- CO4.** Develop blueprint for the services sector and develop a better appreciation of the necessary strategies to create a service excellence.
- CO5.** Recognize the challenges faced in services delivery as outlined in the services gap model

CO-PO Mapping Table:

Course Outcomes	Program Outcomes						
	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	3	1	-	1	1	-	-
CO2	3	1	-	1	1	-	-
CO3	3	1	-	1	1	-	-
CO4	3	1	-	1	1	-	-
CO5	3	1	-	1	1	-	-
Course Correlation Mapping	3	1	-	1	1	-	-

Correlation Levels: **3: High;** **2: Medium;** **1: Low**

COURSE CONTENT

Module 1: INTRODUCTION TO SERVICE **(09 Periods)**

Introduction– Definition– Service Economy – Evolution and growth of service sector – Nature and Scope of Services –Difference between services and tangible products– Unique characteristics of services- Challenges and issues in Services Marketing.

Module 2: SERVICE MARKETING OPPORTUNITIES **(09 Periods)**

Assessing service market potential – Classification of services – Expanded marketing mix – Service marketing – Environment and trends – Service market segmentation, targeting and positioning

Module 3: SERVICE DESIGN AND DEVELOPMENT **(09 Periods)**

Service Life Cycle – New service development – Service Blue Printing – GAP model of service quality – Measuring service quality – SERVQUAL – Service Quality function development.

Module 4: SERVICE DELIVERY AND PROMOTION **(09 Periods)**

Positioning of services – Designing service delivery System, Service Channel – Pricing of services, methods – Service marketing triangle – Managing demand, managing supply, managing Demand and Supply of Service–Integrated Service marketing communication.

Module 5: SERVICE STRATEGIES **(09 Periods)**

Service Marketing Strategies for Health – Hospitality – Tourism – Financial – Logistics– Educational – Marketing of Online Services– Entertainment & public utility Information technique Services

Total Periods:45

EXPERIENTIAL LEARNING

LIST OF EXPERIMENTS:

1. Collect the case studies related to recent trends in service sector and other Contemporary Practices and Present them as a seminar.
2. Different Case Studies Will be Given to students as per the topic that will be collected and evaluated.
3. The case studies will be collected as Assignments and the same will be evaluated.

RESOURCES

TEXT BOOKS:

- 1 Chiristopher H. Lovelock and JochenWirtz, Services Marketing: People, Technology, strategy Pearson Education, New Delhi,8 th edition, 2016.
- 2 John.E.G.Bateson, K.Douglas Hoffman, Services Marketing, South Western Cengage learning, 4th Edition, 2011

REFERENCE BOOKS:

- 1 Kenneth E Clow, et al, Services Marketing Operation Management and Strategy, Biztantra, 2nd Edition, New Delhi, 2004.
- 2 Valarie Zeithaml et al, Services Marketing, 5th International Edition, Tata McGraw Hill, 2007.
- 3 Christian Gronroos, Services Management and Marketing a CRM in Service Competition, 3 rdEdition,Wiley,2007.
- 4 R. Srinivasan, SERVICES MARKETING, Prentice Hall of India Private Limited,4th Edition 2014, New Delhi.
- 5 Vinnie Jauhari&kirti Dutta (2017), Services Marketing, Text and cases, 2nd edition.

VIDEO LECTURES:

- 1 <https://nptel.ac.in/courses>
- 2 <https://www.udemy.com/>

WEB RESOURCES:

1. <https://www.studocu.com/>
2. <https://www.tutorialsduniya.com/>
3. <https://www.scribd.com/>

PROGRAM ELECTIVE

Course Code	Course Title	L	T	P	S	C
25MG201048	INTEGRATED MARKETING COMMUNICATION	3	-	-	-	3
Pre-Requisite	-					
Anti-Requisite	-					
Co-Requisite	-					

COURSE DESCRIPTION: The course provides students with vital concepts and techniques necessary for crafting an effective Integrated Marketing Communication program. It delves into various communication tools, emphasizing their effectiveness and nurturing learners' creativity in shaping marketing communication strategies.

COURSE OUTCOMES: After successful completion of the course, students will be able to:

- CO1.** Understand the concept of integrated Marketing communication and its role.
 - CO2.** Apply their knowledge related to design and execution of advertising campaign and the role of advertisement Agencies.
 - CO3.** Know the different types of Advertisements and measuring the advertisement effectiveness.
 - CO4.** Acquire knowledge on sales promotion, consumer promotion and the impact of sales.
 - CO5.** Evaluate concepts related to PR and publicity campaigns as part of the promotional mix.

CO-PO Mapping Table:

Course Outcomes	Program Outcomes						
	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	3	2	-	1	1	-	-
CO2	3	2	-	1	1	-	-
CO3	3	2	-	1	1	-	-
CO4	3	2	-	1	1	-	-
CO5	3	2	-	1	1	-	-
Course Correlation Mapping	3	2	-	1	1	-	-

Correlation Levels: **3: High;** **2: Medium;** **1: Low**

COURSE CONTENT

Module 1: INTRODUCTION TO MARKETING COMMUNICATION(IMC)

(09 Periods)

An Introduction to Integrated Marketing Communication (IMC): Meaning, Definition, IMC Promotional tools and Role of IMC in marketing process, Marketing Communication Process – Communication response hierarchy - AIDA Model and Hierarchy of effect model

Module 2: INTRODUCTION TO ADVERTISING

(09 Periods)

Definition of Advertising -Objectives-Functions of advertisement - classification of Advertising-Social, Ethical and legal Implications of advertisement - Advertisement agencies- Selection and remuneration - Advertising campaigns -Recent trends in Advertising

Module 3: ADVERTISEMENT MEDIA-PLANNING AND ANALYSIS

(09 Periods)

Media plan – Type and choice criteria – Reach and frequency of advertisements – Cost of Advertisements-Media strategy and scheduling-Different types of advertisements-Advertisement Layout –Principles of Design and Layout-Advertising appeal-Types -Copy structure -Media Research – Testing validity and Reliability of ads – Measuring Effectiveness of Advertisement Techniques

Module 4: SALES PROMOTION

(09 Periods)

Definition - Objectives of sales promotion –Scope of Sales promotion - Sales promotion techniques - Trade oriented and consumer oriented-Online sales promotion- Use of social media for promotion campaigns- Designing a sales promotion campaign –Involvement of salesmen and dealers-Role of promotions in STP

Module 5: PUBLICITY AND PUBLIC RELATIONS

(09 Periods)

Meaning of Publicity, Scope and importance, Methods of publicity-Publicity campaigns Public Relation Meaning - Process of Public relations - Advantages and disadvantages of Public Relation, Tools and techniques of Public Relation- Measuring the Effectiveness of Public Relation

Total Periods:45

EXPERIENTIAL LEARNING

LIST OF EXCERIES:

1. Prepare advertisement for any products of your choice and write your brand name, logo and slogan
2. Select any one Advertising Agency firm and write their Evolution and the list of products advertised by that Advertising agency
3. Prepare sales promotion strategies for a company facing declining sales or losses.
4. create a publicity for a newly established company or organizing an event for a cause

RESOURCES

TEXT BOOKS:

1. Belch, G. E., & Belch, M. A. (2021). Advertising and promotion: An integrated marketing communications perspective (12th ed.). Tata McGraw-Hill Education.
2. Clow, K. E., & Baack, D. E. (2017). Integrated advertising, promotion, and marketing communications (8th ed.). Pearson Education.

REFERENCE BOOKS:

1. Kazmi, S. H. H., & Batra, S. K. (2008). Advertising & sales promotion (3rd ed.). Excel Books.
2. Cummings, J. (2010). Sales promotion (5th ed.). Kogan Page.
3. Wells, W., Moriarty, S., & Burnett, J. (2007). Advertising: Principles & practice (7th ed.). Pearson Education.
4. Jefhwaney, J. (2008). Advertising management (2nd ed.). Oxford University Press.

VIDEO LECTURES:

1. <https://archive.nptel.ac.in/courses/110/107/110107158/>
2. <https://www.youtube.com/watch?v=vpwYsGUWIT8>
3. <https://www.youtube.com/watch?v=1vwCvFyrhWM>

WEB RESOURCES:

1. www.managementstudyguide.com/integrated-marketing-communications.htm
2. <https://www.upwork.com/resources/advertising-agency-basics>
3. <https://sendpulse.com/support/glossary/sales-promotion>
4. <https://www.marketingtutor.net/publicity-definition-characteristics-types-examples/>

PROGRAM ELECTIVE

Course Code	Course Title	L	T	P	S	C
25MG201049	PRODUCT AND BRAND MANAGEMENT	3	-	-	-	3
Pre-Requisite	-					
Anti-Requisite	-					
Co-Requisite	-					

COURSE DESCRIPTION:

This course is designed to provide the student with a good understanding of the concepts, strategies, and trends associated with Product and Brand Management. To help the students explore the current environment in various sectors, understanding the brand valuation methods and advantages of brand equity.

COURSE OUTCOMES: After successful completion of the course, students will be able to:

- CO1.** Understand the overview of Product Concept
- CO2.** Analyse the strategies of Product Management
- CO3.** Apply the Branding Concepts in Business management
- CO4.** Analyze the importance of Brand Equity
- CO5.** Develop the idea of building Brand in various sectors

CO-PO Mapping Table:

Course Outcomes	Program Outcomes						
	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	3	2	-	1	1	-	-
CO2	3	2	-	1	1	-	-
CO3	3	2	-	1	1	-	-
CO4	3	2	-	1	1	-	-
CO5	3	2	-	1	1	-	-
Course Correlation Mapping	3	2	-	1	1	-	-

Correlation Levels: **3: High;** **2: Medium;** **1: Low**

COURSE CONTENT

Module 1: INTRODUCTION TO PRODUCT (09 Periods)

Product Concepts – Product Classification –Product Line and Product Mix – Responsibility of Product Manager

Module 2: PRODUCT MANAGEMENT (09 Periods)

Product Strategies – Management of New Product Development – Product life cycle - Product Positioning Strategies – Packaging Management

Module 3: INTRODUCTION TO BRANDING (09 Periods)

Essentials of Good Brand – Types of Brands – Advantages of Branding – Brand Loyalty – Brand Valuation Methods – Brand Revitalization

Module 4: CREATING AND MANAGING BRAND EQUITY (09 Periods)

Advantages of Brand Equity – Brand Building Strategies – Brand Extension – New Brand Failures

Module 5: BUILDING BRANDS IN DIFFERENT SECTORS (09 Periods)

Branding in the Industrial sector, Retail Sector, Service sector, Banking Sector and Insurance Sector.

Total Periods: 45

EXPERIENTIAL LEARNING

- 1 Examine market trends, consumer behavior, competitor analysis, and branding strategies.
- 2 Role-playing activities to understand various perspectives and develop skills such as negotiation, conflict resolution, communication, and decision-making

RESOURCES

TEXTBOOKS:

- 1 Kotler, P., & Keller, K. L. (2010). Marketing management (15th ed.). Pearson.
- 2 Rao, K. V. (2015). Product & brand management: Text & cases. Himalaya Publishing.

REFERENCE BOOKS:

- 1 Product Management in India, Ramanuj Majumdar, PHI 2010
- 2 Compendium of Brand Management, Chunawalla. S.A, Himalaya 2014
- 3 Brand Management – Text & Cases , Harsh V Verma , Excel 2000

VIDEO LECTURES:

- 1 https://onlinecourses.nptel.ac.in/noc22_mg82/preview
- 2 <https://archive.nptel.ac.in/courses/110/107/110107161/>

WEB RESOURCES:

- 1 https://ebooks.ipude.in/management/mba/term_4/DMGT508_PRODUCT_AND_BRAND_MANAGEMENT.pdf
- 2 <https://www.ddegjust.ac.in/studymaterial/mba/mm-408.pdf>
- 3 <https://www.studocu.com/in/document/xim-university/business-management/product-brand-management-notes-for-management-students/25175362>

PROGRAM ELECTIVE

Course Code	Course Title	L	T	P	S	C
25MG201050	RURAL MARKETING	3	-	-	-	3
Pre-Requisite	-					
Anti-Requisite	-					
Co-Requisite	-					

COURSE DESCRIPTION: This course deals with Understanding the product life cycle and brand management in the rural market context. Exploring rural retailing strategies and opportunities. Marketing strategies specific to the Indian rural market, including segmentation, competitive strategies, and distribution

COURSE OUTCOMES: After successful completion of the course, students will be able to:

- CO1.** Understand various aspects of rural marketing and develop an insight into rural marketing.
- CO2.** Identify the challenges and opportunities in the field of rural marketing.
- CO3.** Analyse concepts and techniques in the area of rural marketing.
- CO4.** Apply adaptations to the rural marketing mix to meet the needs of rural consumers.
- CO5.** Understand the concept and methodology for conducting the research in the rural market.

CO-PO Mapping Table:

Course Outcomes	Program Outcomes						
	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	3	1	-	1	1	-	-
CO2	3	1	-	1	1	-	-
CO3	3	1	-	1	1	-	-
CO4	3	1	-	1	1	-	-
CO5	3	1	-	1	1	-	-
Course Correlation Mapping	3	1	-	1	1	-	-

Correlation Levels: **3: High;** **2: Medium;** **1: Low**

COURSE CONTENT

Module 1: INTRODUCTION TO RURAL MARKETING	(09 Periods)
Definition, Concepts, Nature, Size and scopes of Indian rural marketing, Rural Demand, Buying Characteristics, Rural Market Structure, Demographic, Physical Economic Environment,	
Module 2: UNDERSTANDING THE RURAL CONSUMER	(09 Periods)
Rural Community in India, Profile of Rural markets, Segmenting the Rural Market, Target and Positioning, Rural Consumer Behavior, Rural Buyer Characteristics, Consumer Buying Decision Process, Factors Affecting Consumer Behavior – Cultural, Social, Technological Economic and Political.	
Module 3: MARKETING MIX IN RURAL MARKETING	(10 Periods)
Product: Concept and Product Mix Decisions, Pricing Strategy: Objectives, Policies and Strategies, Promotion: Advertising, Sales Promotions, Communication in Rural marketing, language and Culture Distribution Strategies, Channels of Distribution, Role of Co-operative, Government, Financial Institutions, Public Sector Undertakings, Regulated Markets and Public Distribution Systems.	
Module 4: INNOVATION IN RURAL MARKETING	(09 Periods)
Significance of innovation in rural markets, The intervention of IT in Rural Markets: Importance and Initiatives, The emergence of Organized retailing in Rural India, Key Drivers of Organized Retail Cases in organized retail: Operative Models adopted by Indian Companies.	
Module 5: FUTURE OF RURAL MARKETING	(08 Periods)
Changing Role of Rural Sector in India; Rural Income and Demand, Problems in Marketing of agricultural inputs in Rural India – Chemical fertilizers, Present Scenario- Rural Female Empowerment, Micro Financing, Mobility in Emerging Markets, Growing Rural Tourism.	

Total Periods:45

EXPERIENTIAL LEARNING

1. Give a seminar on operation strategy as a competitive tool and submit a report.
2. Generate the idea of a new product and develop a prototype product.
3. Collect any case study of material management related to manufacturing company and present a summary report.

RESOURCES

TEXT BOOKS:

1. Badi, R. V. (2008). Rural marketing: Text and cases. Excel Books.
2. Mathur, U. C. (2008). Rural marketing: Text and cases. Excel Books.

REFERENCE BOOKS:

1. Sumesh, R., & Agarwal, V. (2010). Scope and challenges in rural marketing in India. Excel Books.
2. Charyulu, C. S. G. K., & Ramakrishnan, L. (2011). Rural marketing: Text & cases. Pearson Education.

VIDEO LECTURES:

1. <https://www.youtube.com/watch?v=b2-wHE8Cwdw>
2. <https://www.youtube.com/watch?v=kDomIMHGRrc>

WEB RESOURCES:

1. https://ebooks.ipude.in/management/mba/term_4/DMGT509_RURAL_MARKETING.pdf
2. https://epgp.inflibnet.ac.in/epgpdata/uploads/epgp_content/S000032SW/P001729/M021655/ET/1509102407Module-32_e-Text.pdf

PROGRAM ELECTIVE

Course Code	Course Title	L	T	P	S	C
25MG201051	INTERNATIONAL MARKETING	3	-	-	-	3
Pre-Requisite	-					
Anti-Requisite	-					
Co-Requisite	-					

COURSE DESCRIPTION: This course provides an experience in an unfamiliar market setting, build skills in using online international databases, and present a group project on a topic of global interest.

COURSE OUTCOMES: After successful completion of the course, students will be able to:

- CO1.** Understand international marketing concepts
- CO2.** Evaluate international marketing environment
- CO3.** Assign global market opportunities
- CO4.** Differentiate international markets strategies from domestic market Strategies
- CO5.** Gain exposure to international promotional strategy

CO-PO Mapping Table:

Course Outcomes	Program Outcomes						
	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	3	1	-	1	1	-	-
CO2	3	1	-	1	1	-	-
CO3	3	1	-	1	1	-	-
CO4	3	1	-	1	1	-	-
CO5	3	1	-	1	1	-	-
Course Correlation Mapping	3	1	-	1	1	-	-

Correlation Levels: **3: High;** **2: Medium;** **1: Low**

COURSE CONTENT

Module 1: INTRODUCTION INTERNATIONAL MARKETING (09 Periods)

Concepts- Key Concepts -Evolution of International Marketing-Drivers towards Internalization International Marketing objectives – Theoretical Foundations – Country Specific Advantages Firm Specific Advantages-Rivalry between International Competitors.

Module 2: INTERNATIONAL MARKETING ENVIRONMENT (09 Periods)

Economic Environment – Political and Legal Environment – Cultural Environment Analyzing International Marketing Environment.- US Europe, Asia and Eastern Marketing.

Module 3: INTERNATIONAL MARKET SELECTION AND ENTRY STRATEGIES (10 Periods)

Assessing Global Market Opportunities – Country Attractiveness–Understanding Local Customers- Multinational Market Regions–International Segmentation and Positioning– International Mature Markets–Growth Markets –Emerging Markets.

Module 4: INTERNATIONAL MARKETING STRATEGIES (09 Periods)

International products and Services – Standardization Vs. Localization–International Product Lines –International Brand Management–International Pricing–Financial Issues –Transfer Pricing –Counter Trade–International Pricing Policies

Module 5: INTERNATIONAL PROMOTION STRATEGIES (08 Periods)

Promotion as Competitive Advantage –Pros and Cons of Inter-national Advertising – International Advertising Decisions –International Sales Promotions–Direct Marketing– International Personal Selling– International Distribution – Rationalizing Local Channels– International Logistics–International Channel Design.

Total Periods:45

EXPERIENTIAL LEARNING

1. Collect various cases relating to International Marketing and discuss in class room and team discussions and to write assignments as experiential learning.
2. Present Videos how few international marketing issues resolved by the CEOs and General Managers under different environments.
3. Role plays for decision making in different international marketing contexts.

RESOURCES

TEXT BOOKS:

1. Johansson, J. K. (2016). Global marketing: Foreign entry, local marketing, and global management. Tata McGraw-Hill.
2. Gillespie, K., Jeannet, J. P., & Hennessey, H. D. (2016). International marketing. Cengage Learning.

REFERENCE BOOKS:

1. Philip R. Cateora, John L. Graham, Prasht Salwan – International Marketing – Tata McgrawHill,NewDelhi-2016.
2. P.K.Vasudeva–InternationalMarketing–ExcelBooks–NewDelhi,2016.

VIDEO LECTURES:

1. <https://www.youtube.com/watch?v=ch9OjWY6hjE>
2. https://www.youtube.com/watch?v=yjQvcMcw_WE3.

WEB RESOURCES:

1. <https://international-marketing.univie.ac.at/studies/links-resources/international-marketing-resources/>
2. <https://journals.sagepub.com/home/jig>

PROGRAM ELECTIVE

Course Code:	Course Title	L	T	P	S	C
25MG201052	GREEN MARKETING	3	-	-	-	3
Pre-Requisite	-					
Anti-Requisite	-					
Co-Requisite	-					

COURSE DESCRIPTION: The course is designed to understand the importance of Green Marketing on consumer satisfaction and environmental safety. Green revolution, going green, environment protection, and sustainable development have become the buzz words today.

COURSE OUTCOMES: After successful completion of the course, students will be able to:

- CO1.** Understand green marketing and its importance.
- CO2.** Describe the current state of the environment
- CO3.** Understand the opportunities, challenges, and issues in designing and implementing green marketing strategies.
- CO4.** Demonstrate knowledge on green consumer segments
- CO5.** Assess the tools and techniques for project review and evaluation

CO-PO Mapping Table:

Course Outcomes	Program Outcomes						
	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	3	1	-	1	1	-	-
CO2	3	1	-	1	1	-	-
CO3	3	1	-	1	1	-	-
CO4	3	1	-	1	1	-	-
CO5	3	1	-	1	1	-	-
Course Correlation Mapping	3	1	-	1	1	-	-

Correlation Levels: **3: High;** **2: Medium;** **1: Low**

COURSE CONTENT

Module 1: FUNDAMENTALS OF GREEN MARKETING: (09 Periods)

Meaning & Concept & Evolution of Green Marketing, Types of Green Marketing, Difference in between Marketing & Green Marketing, Green Product - Green Marketing – Importance of Green Marketing - Importance of green marketing -

Module 2: SEGMENTATION OF GREEN MARKETING: (09 Periods)

Green Spinning – Green Selling – Green Harvesting – Enviropreneur Marketing - Compliance Marketing – Green Washing – Climate Performance Leadership Index Promotional Channels of Green Marketing..

Module 3: GREEN MARKETING POLICIES: (10 Periods)

Introduction to Green Marketing Policy & Process, Green Firms – HCL's Green Management Policy – IBM's Green Solutions – IndusInd Bank's Solar Powered ATMs – ITCs Paperkraft – Maruti's Green Supply Chain – ONCGs Mokshada Green Crematorium – Reva's Electric Car – Samsung's Eco-friendly handsets- Wipro Infotech's Eco-friendly computer peripherals.

Module 4: ENVIRONMENTAL CONSCIOUSNESS: (09 Periods)

Introduction to Environment Consciousness, Types of Environmental Consciousness - Importance of environmentalism - Environmental movement - Benefits of green environment to the society -

Module 5: ENVIRONMENTAL TECHNOLOGICAL & LEGAL ASPECTS: (08 Periods)

Manufacturing industry: Energy consumption and GHG emissions, Long-term changes in sustainable "Production and Consumption", Sustainable Patterns of Materials, Sustainable Energy and Climate Technologies, Green Technologies for Energy Intensive, Selected Emerging Green Technologies: Carbon capture and Storage (CCS) and Renewables.

Total Periods:45

EXPERIENTIAL LEARNING

1. Present a case study report green marketing practices and its impact on business.
2. Visit any green manufacturing unit and present a PPT of your observations on best practices in the unit.
3. Present a ted talk summary report on Green Marketing Challenges.

REFERENCES

TEXT BOOKS:

1. Dahlstrom, R. Green marketing management. Cengage Learning India.
2. Meera, M. Green marketing: Concepts, literatures, and examples. Evinco pub Publishing.

REFERENCE BOOKS:

1. Green Marketing: Challenges and Opportunities for the New Marketing Age, Jacquelyn A. Ottman, NTC Business Books, 1993. Latest Edition.
2. The New Rules of Green Marketing, Jacquelyn A. Ottman, Berrett-Koehler Publishers, 2011. Latest Edition.

VIDEO LECTURES:

1. <https://www.youtube.com/watch?v=7vpCAx0bxks>
2. <https://www.youtube.com/watch?v=iv00moN0Das>

WEB RESOURCES:

1. <https://www.unescap.org/sites/default/files/31.%20FS-Green-Marketing.pdf>
2. <https://core.ac.uk/download/pdf/141448005.pdf>

Course Code	Course Title	L	T	P	S	C
25MG201053	Digital Marketing	3	-	-	-	3
Pre-Requisite	-					
Anti-Requisite	-					
Co-Requisite	-					

COURSE DESCRIPTION: This course provides a comprehensive overview of digital marketing strategies and tools used in today's digital-first world. Students will learn how to effectively promote brands, products, and services through various digital channels such as search engines, social media, email, content marketing, influencer marketing, and mobile platforms.

COURSE OUTCOMES: After successful completion of the course, students will be able to:

- CO1.** Understand the core concepts of Digital Marketing.
- CO2.** Understand the basics of Mobile Marketing
- CO3.** Apply SEO and SEM strategies to improve online visibility.
- CO4.** Discuss E-mail marketing techniques
- CO5.** Develop and present a comprehensive digital marketing strategies

CO-PO Mapping Table:

Course Outcomes	Program Outcomes						
	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	3	2	-	2	-	-	2
CO2	2	2	-	2	-	-	3
CO3	3	3	-	2	2	1	3
CO4	2	2	-	2	2	1	2
CO5	3	3	2	3	3	2	3
Course Correlation Mapping	3	3	2	2	2	1	3

Correlation Levels: **3: High;** **2: Medium;** **1: Low**

COURSE CONTENT

Module 1: INTRODUCTION TO DIGITAL MARKETING **(08 Periods)**

Meaning of Digital Marketing, Differences from Traditional Marketing, Return of Investments on Digital Marketing vs. Traditional Marketing, E Commerce, Tools used for successful marketing, SWOT Analysis of Business for Digital Marketing, Meaning of Blogs, Websites, Portal and Their Differences, Visibility, Visitor Engagement, Conversion Process, Retention, Performance Evaluation.

Module 2: MOBILE MARKETING **(08 Periods)**

Meaning, types & Evolution, Mobile – market size and rate of growth, Mobile applications, Types of Mobile Marketing, Advantages and Disadvantages of Mobile marketing, Performance Marketing: definition, benefits.

Module 3: SEARCH ENGINE OPTIMIZATION (SEO) **(10 Periods)**

On page Optimization Techniques, Off Page Optimization Techniques, Preparing Reports, Creating Search Campaigns, Creating Display Campaigns. Social Media Optimization (SMO): Introduction to Social Media Marketing, Advanced Facebook Marketing,

Module 4: EMAIL MARKETING **(09 Periods)**

Email Marketing: Need for Emails, Types of Emails, options in Email advertising, Do's and Don'ts of an email marketing campaign, Introduction to E-mail marketing tool- Mailchimp.

Module 5: PRESENT A COMPREHENSIVE DIGITAL MARKETING STRATEGY **(10 Periods)**

Word press Blog Creation, Twitter Marketing, LinkedIn Marketing, Instagram Marketing, social media Analytical Tools. Pay Per Click, Google AdWords, Display Advertising Techniques, Report Generation

Total Periods:45

EXPERIENTIAL LEARNING

LIST OF EXCERIES:

1. Write a 500-word blog post optimized for that keyword, including title, meta description, H1, and internal/external links.
2. Compare social media presence, website traffic, and content strategy.
3. Above all will be detailed in CHO.

RESOURCES

TEXT BOOKS:

1. Damian Ryan & Calvin Jones. Understanding DIGITAL Marketing, 2009, ISBN 9780749453893

REFERENCE BOOKS:

1. Ahuja, V. (2015). Digital marketing. Oxford University Press.
2. Evans, D., & Bratton, S. (2010). Social media marketing: The next generation of business engagement. Wiley.
3. Pain, G. (2019). Marketing automation and online marketing: Automate your business through marketing best practices such as email marketing and search engine optimization. Independently published.

VIDEO LECTURES:

1. https://onlinecourses.nptel.ac.in/noc24_cs65/preview
2. <https://nptel.ac.in/courses/106106361>

WEB RESOURCES:

1. <https://www.coursera.org/learn-foundations-of-digital-marketing-and-e-commerce>
2. <https://online.hbs.edu/courses/digital-marketing/>
3. <https://open.umn.edu/opentextbooks/textbooks/1602>

Course Code	Course Title	L	T	P	S	C
25MG201054	Logistics and Supply Chain Management	3	-	-	-	3
Pre-Requisite	-					
Anti-Requisite	-					
Co-Requisite	-					

COURSE DESCRIPTION: This course provides an in-depth exploration of the principles, strategies, and practices that govern modern supply chain and logistics management. Students will learn how goods, services, and information flow from suppliers to customers through interconnected networks and how effective logistics strategies contribute to competitive advantage.

COURSE OUTCOMES: After successful completion of the course, students will be able to:

- CO1.** Understand core concepts of supply chain and logistics management.
- CO2.** Evaluate logistics options including warehousing, and inventory systems.
- CO3.** Evaluate logistics options of transportation in Supply Chain and Logistic management.
- CO4.** Analyze Emerging technologies in Logistics and Supply chain management
- CO5.** Evaluate comprehensive Dimensions' in Supply Chain and Logistic Management

CO-PO Mapping Table:

Course Outcomes	Program Outcomes						
	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	3	2	-	2	-	-	2
CO2	3	3	-	2	2	2	3
CO3	3	3	-	2	2	2	3
CO4	3	3	-	3	2	2	3
CO5	3	3	-	3	2	3	3
Course Correlation Mapping	3	3	-	2	2	2	3

Correlation Levels: **3: High;** **2: Medium;** **1: Low**

COURSE CONTENT

Module 1: INTRODUCTION TO SUPPLY CHAIN AND LOGISTIC (08 Periods) MANAGEMENT

Concepts of Logistics – Evolution – Nature and Importance – Components of Logistics Management- Competitive advantages of Logistics – Functions of Logistics management – Principles – Logistics Network- Integrated Logistics system, Supply chain management – Nature and Concepts – Value chain- Functions – Supply chain effectiveness – Outsourcing – 3PLs and 4PLs – Supply chain relationships – Customer services.

Module 2: ELEMENTS OF INVENTORY CARRYING AND WAREHOUSING (08 Periods)

Elements of Logistics and Supply chain management – Inventory carrying – Ware housing, Technology in the ware house: Computerization, Barcoding, RFID and WMS – Material handling, Concepts and Equipment's: Automated Storage and Retrieval Systems – Order Processing – Difference between warehouse and distribution center.

Module 3: TRANSPORTATION IN LOGISTICS AND SUPPLY CHAIN (10 Periods) MANAGEMENT

Transportation – Position of Transportation in Logistics and Supply chain management-Road, Rail, Ocean Transport - Ships- Types- Measurement capacity of ships – shipping information, Air, Transport Multi model transport – containerization – CFS – ICDS Cross Docking- Selection of transportation mode – Transportation Network and Decision – Insurance aspects of logistics.

Module 4: LOGISTICAL INFORMATION SYSTEM (LIS) (09 Periods)

Logistical Information System (LIS) - Operations – Integrated IT solution for Logistics and supply chain management- Emerging technologies in Logistics and Supply chain management. Components of a logistic system-transportation-Inventory carrying-warehousing order processing –Distribution channels- Demand Forecasting – Impact of Forecasts on Logistics and Supply chain Management- Performance measurements.

Module 5: PRESENT A COMPREHENSIVE DIGITAL MARKETING STRATEGY (10 Periods)

Performance- Bench marking for supply chain improvement- Dimensions and achieving excellence- Supply Chain Measures – SCOR model- Logistics score board- Activity Based Costing - Economic Value Added Analysis- Balance Score card approach-Lean thinking and six sigma approach in Supply Chain.

Total Periods:45

EXPERIENTIAL LEARNING

LIST OF EXCERIES:

1. clear understanding of how interconnected each function is—from procurement and production to distribution and customer service.
2. Exposure to transportation modes, warehouse layout planning, and route optimization tools taught me how to improve delivery performance and reduce logistics costs.
3. Above all will be detailed in CHO.

RESOURCES

TEXT BOOKS:

1. Coyle, J. J., Langley, C. J., Jr., Novack, R. A., & Gibson, B. J. Supply chain management: A logistics perspective (11th ed.). Cengage Learning.

REFERENCE BOOKS:

1. Agarwal, D. K. Textbook of logistics and supply chain management. Macmillan Publishers India Ltd.
2. Chase, R. B., Shankar, R., & Jacobs, F. R. Operations and supply chain management (13th ed.). McGraw-Hill Education.
3. Wisner, J. D., Tan, K.-C., & Leong, G. K. Principles of supply chain management: A balanced approach (5th ed.). Cengage Learning.

VIDEO LECTURES:

1. <https://nptel.ac.in/courses/106106361>
2. https://onlinecourses.nptel.ac.in/supplychain_and_logistics/preview

WEB RESOURCES:

1. <https://online.hbs.edu/courses/>
2. <https://open.umn.edu/opentextbooks/textbooks/1602>
3. <https://open.umn.edu/opentextbooks/textbooks/1602>

UNIVERSITY ELECTIVE

Course Code	Course Title	L	T	P	S	C
25MG201705	MODELING WITH EXCEL	3	-	-	-	3

Pre-Requisite -

Anti-Requisite -

Co-Requisite -

COURSE DESCRIPTION: These subject students will understand the importance of preparing a template, isolating assumptions, and growth drivers, and integrating your model to facilitate modification and analysis

COURSE OUTCOMES: This course aims to understand how managers utilize financial analytics to formulate and solve business problems, thereby supporting managerial decision-making.

- CO1.** Demonstrate competencies in financial analysis and decision making
- CO2.** Pursue a career in the field of Risk management, Investment banking and allied professions in the field of Finance.
- CO3.** Gain experiential learning through well-structured internships and live projects.
- CO4.** to analyze and learn about India through the association of ideas in the texts and the external contexts
- CO5.** To Understand Survival analysis and its application- Six Sigma through R

CO-PO Mapping Table:

Course Outcomes	Program Outcomes												Program Specific Outcomes		
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3	-	-	-	1	-	-	-	-	2	-	2	3	2	-
CO2	3	-	-	-	1	-	-	-	-	2	-	2	3	2	-
CO3	3	-	2	-	2	-	-	-	-	2	-	2	3	-	2
CO4	3	1	2	-	2	-	-	-	-	2	-	2	3	-	2
CO5	3	-	2	-	2	-	-	-	-	2	1	2	3	-	2
Course Correlation Mapping	3	1	2	-	2	-	-	-	-	2	1	2	3	2	2

Correlation Levels: **3: High;** **2: Medium;** **1: Low**

COURSE CONTENT

Module 1: INTRODUCTION TO MODELLING

(05 Periods)

Introduction to Modelling – Types and Purposes of Business Models – Rules for Model Design– Model Layout Flow Charting – Steps to Building a Model – Best Practice-Principles of Modelling – Documentation – Preparing and Presentation of Model Results – Model Review –Auditing a Model.

Module 2: INTRODUCTION TO EXCEL

(10 Periods)

Excel functions – Importing and Exporting Data – Financial Functions (PV, FV Rate, NPER, IRR, NPV, MIRR, XNPV, XIRR, effect, Nominal, Price) – Lookup and Reference Functions (Choose, Offset, Match, Indirect, Lookup) – Statistical Functions- What if Functions Goal Seek, Solver – Pivot Table- Conditional Formatting– Array Formulas.

Module 3: TECHNIQUES OF FINANCIAL ANALYSIS

(10 Periods)

Financial Analysis Techniques - Ratio Analysis, Du-Point Analysis –Loan Amortization - Capital Budgeting Decisions – Scenario Analysis with Scenario Manager –Forecasting Techniques: Application of Predicative Analytics in Retail – Direct marketing- Financial services-financial Time Series Their Characteristics.

Module 4: MARKETING AND HR METRICS

(10 Periods)

Estimating Demand Curves – Revenue Management – Computing Marketing Metrics – Take Rate, Churn, Customer Satisfaction – Customer Life Time Value – Cost Per Click – Transaction Conversion Rate – Bounce Rate- HR Analytics- its Advantages & Disadvantages.

Module 5: TIME SERIES ANALYSIS AND PROJECT MANAGEMENT

(10 Periods)

Forecasting – Time Series and Exponential Smoothing – Production Order Quantity Model – Acceptance Sampling – Material Requirement Planning –Quality Control Charts – Lot Sizing Methods –

Total Periods:45

EXPERIENTIAL LEARNING: Case studies, group discussion, Assignments, Field study reports

LIST OF EXPERIMENTS:

1. Financial Analytics lab
2. Financial functions using Excel
3. SPSS using Excel

RESOURCES

TEXTBOOKS:

1. Sheeba Kapil, Financial Valuation and Modelling, Wiley, 1e,2022.
2. R. Narayanaswamy, Financial Accounting-Managerial Perspective, PHI,7e,2022.
3. Timothy Mayes, Financial Analysis with MS Excel, Cengage, 7e, 2013.
4. Vijay Gupta, Financial Analysis using Excel, VJ Books Inc, Canada.

REFERENCE BOOKS:

1. Modelling With Excel - ISBN: 9789356255203- Scientific International Publishing House (SIPH)-Mr. S.Chandra Sekhar, Dr. Shaik Karim Prof. S S Prasada Rao Dr. J. Murthy Dr. K. Balaji
2. Financial Analysis and Modeling using Excel and VBA – Chandan Sengupta
3. Advanced Financial Modelling in Excel
4. Mastering Financial Modelling in Microsoft Excel – Alastair Day

VIDEO LECTURES:

1. <https://youtu.be/-pws4pPiDFs>
2. <https://youtu.be/7svJMPtNT0Q>
3. <https://youtu.be/2PkpdNKFAPQ>
4. <https://youtu.be/-ivpFNCU4CY>
5. https://www.w3schools.com/excel/excel_formatting.php

WEB RESOURCES:

1. https://www.iare.ac.in/sites/default/files/lecture_notes/IARE_FM_NOTES.pdf
2. <https://corporatefinanceinstitute.com/resources/ebooks/financial-modeling-best-practices-ebook/>
3. <https://open.umn.edu/opentextbooks/textbooks/70>
4. <https://www.pdfdrive.com/advance-excel-books.html>
5. https://www.iare.ac.in/sites/default/files/lecture_notes/IARE_FM_NOTES.pdf

SPECIALISATION ELECTIVE

Course Code	Course Title	L	T	P	S	C
25MG202004	PREDICTIVE ANALYTICS WITH PYTHON	2	-	2	-	3
Pre-Requisite	-					
Anti-Requisite	-					
Co-Requisite	-					

COURSE DESCRIPTION: The course predictive Analytics with Python gives insights into predictive modeling, data processing and basic statetical and machine learning algorithms lead to better analysis of data.

COURSE OUTCOMES: After successful completion of the course, students will be able to:

- CO1.** Understand the usage of python functions and packages.
- CO2.** Acquire skills to connect to various types of files and to visualize the data.
- CO3.** Apply data processing and wrangling functions on datasets.
- CO4.** Understand sampling methods and hypothesis testing methods.
- CO5.** Implement linear regression and model validation.

CO-PO Mapping Table:

Course Outcomes	Program Outcomes												Program Specific Outcomes		
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CO2	3	-	-	-	1	-	-	-	-	-	-	-	-	-	-
CO3	3	1	-	1	1	-	-	-	-	1	-	-	1	-	-
CO4	3	1	-	1	1	-	-	-	-	-	-	-	-	-	-
CO5	3	-	1	-	1	-	-	-	-	1	-	-	-	1	-
Course Correlation Mapping	3	1	1	1	2	-	-	-	-	1	-	-	1	1	-

Correlation Levels: **3: High;** **2: Medium;** **1: Low**

COURSE CONTENT

Module 1: GETTING STARTED WITH PREDICTIVE MODELLING **(06 Periods)**

Introducing predictive modelling, Scope of predictive modelling, python and its packages- download and installation.Jupyter Notebook, Python Functions, Python Types and Sequences, Python Strings, Reading and Writing CSV files.

Module 2: DATA CLEANING **(06 Periods)**

Reading the data – Variations and examples, Various methods of importing data in python, Treating missing values, Visualizing a dataset by basic plotting – Scatter plots, Histograms, Boxplots.

Module 3: DATA WRANGLING **(06 Periods)**

Subsetting a dataset - Selecting columns – Selecting rows – Selecting a combination of rows and columns, Generating random numbers and their usage, Random sampling - splitting a dataset in training and testing datasets - using the Customer Churn Model, using sklearn, using the shuffle function, Concatenating and appending data - Merging/joining datasets.

Module 4: STATISTICAL CONCEPTS FOR PREDICTIVE MODELLING **(06 Periods)**

Random sampling and the central limit theorem, Hypothesis testing - Null versus alternate hypothesis - Z-statistic and t-statistic- A step-by-step guide to do a hypothesis test, An example of a hypothesis test -Chi-square tests – Correlation

Module 5: LINEAR REGRESSION WITH PYTHON **(06 Periods)**

Linear Regression with Python, Linear regression using simulated data, Making sense of result parameters - p-values - F-statistics - Residual Standard Error, Implementing linear regression with Python, Model validation

Total Periods:30

EXPERIENTIAL LEARNING

List of Exercises

1. Demonstrate sequence types in python
2. Demonstrate Arrays(pandas) in python
3. Perform data visualization
4. Handle missing values from titanic survival data set.
5. Perform chi square test on a dataset.
6. Demonstrate sklearn and shuffle function.
7. Perform random sampling.
8. Perform linear regression.

RESOURCES

TEXT BOOKS:

1. McKinney, W. (2022). Python for data analysis: Data wrangling with pandas, NumPy, and Jupyter (3rd ed.). O'Reilly Media.
2. Raschka, S., & Mirjalili, V. (2019). Python machine learning: Machine learning and deep learning with Python, scikit-learn, and TensorFlow 2 (3rd ed.). Packt Publishing.

REFERENCE BOOKS:

1. VanderPlas, J. (2016). Python data science handbook: Essential tools for working with data. O'Reilly Media.
2. Shmueli, G., Bruce, P. C., Gedeck, P., & Patel, N. R. (2020). Data mining for business analytics: Concepts, techniques, and applications in Python (1st ed.). Wiley.
3. Chollet, F. (2021). Deep learning with Python (2nd ed.). Manning Publications.

VIDEO LECTURES:

1. <https://www.youtube.com/watch?v=GPVsHOIRBBI>
2. <https://www.youtube.com/watch?v=DFq6j-a2N3o>

WEB RESOURCES:

1. <https://www.pixelcrayons.com/blog/python-for-business-analytics/>
2. https://python-course.eu/books/bernd_klein_python_data_analysis_a4.pdf
3. <https://www.urskillpartner.blogspot.com>
4. <https://www.cin.ufpe.br/~embat/Python%20for%20Data%20Analysis.pdf>

Course Code	Course Title	L	T	P	S	C
25MG201055	BUSINESS FORECASTING	3	-	-	-	3
Pre-Requisite	-					
Anti-Requisite	-					
Co-Requisite	-					

COURSE DESCRIPTION: This course provides a comprehensive understanding of forecasting concepts, methods, and applications in real-world business environments. The course covers both **qualitative** and **quantitative** forecasting techniques, including **time series analysis, regression models, econometric methods, and advanced tools** such as ARIMA and AI-driven forecasting. Emphasis is placed on **practical application**, data interpretation, and the integration of forecasting into business planning and decision-making processes.

COURSE OUTCOMES: After successful completion of the course, students will be able to:

- CO1.** understand the fundamentals of business forecasting
- CO2.** understand and evaluate various qualitative forecasting techniques and apply them while recognizing their practical use cases and limitations in business decision-making.
- CO3.** analyze and interpret the components of a time series, apply various time series models and forecasting techniques
- CO4.** apply regression and correlation analysis, understand basic econometric modeling, interpret economic indicators, and utilize software tools
- CO5.** understand and apply advanced forecasting techniques such as ARIMA models, AI-based methods, scenario planning, and simulation

CO-PO Mapping Table:

Course Outcomes	Program Outcomes						
	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	3	1	-	1	-	-	-
CO2	3	3	-	1	-	-	-
CO3	3	3	-	2	1	-	-
CO4	3	3	-	2	1	1	-
CO5	3	3	1	2	2	-	-
Course Correlation Mapping	3	3	1	2	1	1	-

Correlation Levels: **3: High;** **2: Medium;** **1: Low**

COURSE CONTENT

Module 1: INTRODUCTION TO BUSINESS FORECASTING (08 Periods)

Definition and Scope of Business Forecasting- Importance and Applications in Business Planning- Types of Forecasting: Qualitative and Quantitative-Steps in the Forecasting Process-Challenges in Forecasting-Selection of Forecasting Techniques

Module 2: QUALITATIVE FORECASTING METHODS (08 Periods)

Expert Opinion (Delphi Method)- Market Research and Survey Methods- Jury of Executive Opinion-Historical Analogy- Use Cases and Limitations of Qualitative Methods

Module 3: TIME SERIES ANALYSIS (09 Periods)

Components of Time Series: Trend, Seasonal, Cyclical, and Irregular- Time Series Models: Additive and Multiplicative- Moving Averages (Simple & Weighted)- Exponential Smoothing (Single, Double, and Holt-Winters Method)-Trend Projection using Least Squares

Module 4: CAUSAL AND ECONOMETRIC FORECASTING MODELS (10 Periods)

Simple and Multiple Linear Regression- Correlation Analysis- Econometric Modelling Basics- Leading, Lagging, and Coincident Indicators-Use of Software (e.g., Excel, SPSS, R) in Forecasting

Module 5: ADVANCED FORECASTING TECHNIQUES AND APPLICATIONS (10 Periods)

ARIMA Models (Box-Jenkins Methodology)- Artificial Intelligence in Forecasting (ANNs, ML Models – Intro level)- Scenario Planning and Simulation Techniques- Forecast Evaluation: MSE, MAD, MAPE- Applications in Sales, Finance, HR, and Operations

Total Periods:45

EXPERIENTIAL LEARNING

LIST OF EXCERIES:

1. Apply basic time series forecasting methods to historical sales data.
2. Use regression to model the relationship between advertising expenditure and sales.
3. Evaluate and compare the accuracy of two different forecasting methods.
4. Above all will be detailed in CHO.

RESOURCES

TEXT BOOKS:

3. Keith Ord, Robert Fildes, Nikos Kourentzes: Principles of Business Forecasting (2nd Edition) Wessex Inc.
4. Simy Joy, Payal Anand, Priya Nair Rajeev: Business Forecasting (9th Edition) Pearson Education India

REFERENCE BOOKS:

3. John E. Hanke, Dean W. Wichern: Business Forecasting (9th Edition) Pearson Education India
4. Galit Shmueli, Kenneth C. Lichtendahl Jr. Practical Time Series Forecasting with R (2nd Edition) Pothi.com
5. A. Reza Hoshmand: Business Forecasting: Publisher: Routledge

VIDEO LECTURES:

1. https://onlinecourses.nptel.ac.in/noc24_mg66/preview
2. https://onlinecourses.nptel.ac.in/noc24_mg66/preview

WEB RESOURCES:

4. https://ibf.org/?utm_source=chatgpt.com
5. https://arxiv.org/abs/2207.07788?utm_source=chatgpt.com
6. https://www.getweflow.com/resources/forecasting?utm_source=chatgpt.com

Course Code	Course Title	L	T	P	S	C
25MG202005	DATA MINING AND MACHINE LEARNING	2	-	2	-	3
Pre-Requisite	-					
Anti-Requisite	-					
Co-Requisite	-					

COURSE DESCRIPTION: Data Mining and Machine Learning is a course that explores techniques for extracting meaningful patterns and knowledge from large datasets. It covers fundamental algorithms in machine learning, such as classification, clustering, and regression. Students learn to apply data preprocessing, feature selection, and model evaluation methods to improve prediction accuracy. The course emphasizes practical implementation using real-world datasets and tools. By the end, learners gain the skills to build intelligent systems that can analyse and interpret complex data.

COURSE OUTCOMES: After successful completion of the course, students will be able to:

- CO1.** Perform the preprocessing of data and apply mining techniques on it.
- CO2.** Recognize the characteristics of machine learning that make it useful to solve real-world problems.
- CO3.** Design and implement machine learning solutions of classification, regression problems.
- CO4.** Choose an appropriate clustering technique to solve real-world problems.
- CO5.** Choose a suitable machine learning model, implement and examine the performance of the chosen model

CO-PO Mapping Table:

Course Outcomes	Program Outcomes						
	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	3	1	-	1	-	-	-
CO2	3	3	-	1	-	-	-
CO3	3	3	-	2	1	-	-
CO4	3	3	-	2	1	1	-
CO5	3	3	1	2	2	-	-
Course Correlation Mapping	3	3	1	2	1	1	-

Correlation Levels: **3: High;** **2: Medium;** **1: Low**

COURSE CONTENT

Module 1: INTRODUCTION (05 Periods)

INTRODUCTION TO DATA MINING: Introduction, What is Data Mining, Definition, Knowledge Discovery from Data (KDD), What Kinds of Data can be Mined, Data Mining Tasks, Integration of Data Mining System With A Database or Data Warehouse System, Types of Data Sets and Attribute Values. PREPROCESSING: Data Quality, Major Tasks in Data Pre-processing, Data Cleaning and Data Integration, Data Reduction, Data Transformation and Data Discretization, Measures of Similarity and Dissimilarity-Basics

Module 2: ASSOCIATION RULES (06 Periods)

INTRODUCTION TO MACHINE LEARNING: Introduction to machine learning, learning problems and scenarios, need for machine learning, types of learning, standard learning tasks. ASSOCIATION RULES: Problem Definition, Frequent Item Set Generation, The APRIORI Principle, Support and Confidence Measures, Association Rule Generation; APRIORI Algorithm, Compact Representation of Frequent Item Set- Maximal Frequent Item Set

Module 3: SUPERVISED LEARNING (06 Periods)

Learning a Class from Examples, Linear, Non-linear, Multi-class and Multi-label classification, Perceptron: multilayer neural networks back propagation - learning neural network structures, support vector machines: soft margin SVM going beyond linearity, generalization and overfitting regularization validation. Decision Trees: ID3, Classification and Regression Trees (CART), Regression: Linear Regression, Multiple Linear Regression, Logistic Regression.

Module 4: UNSUPERVISED LEARNING (07 Periods)

Introduction to clustering, Hierarchical: AGNES,DIANA, Partitional: K-means clustering, K-Mode Clustering, Self-Organizing Map, Expectation Maximization, Gaussian Mixture Models, Principal Component Analysis (PCA), Locally Linear Embedding (LLE), Factor Analysis, Neural Networks: Introduction, Perceptron, Multilayer Perceptron, Support vector machines: Linear and Non Linear, Kernel Functions, K-Nearest Neighbors.

Module 5: ENSEMBLE AND PROBABILISTIC LEARNING (06 Periods)

Ensemble Learning Model Combination Schemes, Voting, Error-Correcting Output Codes, Bagging: Random Forest Trees, Boosting: Adaboost, Gradient Boosting, Xg boost, Stacking, Bayesian Learning, Bayes Optimal Classifier, Naïve Bayes Classifier, Bayesian Belief Networks, Mining Frequent Patterns

Total Periods:30

EXPERIENTIAL LEARNING

LIST OF EXCERIES:

- 1 Apply basic time series forecasting methods to historical sales data.
- 2 Use regression to model the relationship between advertising expenditure and sales.
- 3 Evaluate and compare the accuracy of two different forecasting methods.

RESOURCES

TEXT BOOKS

- 1 Data Mining: Concepts and Techniques Jiawei Han, Micheline Kamber, Jian Pei (2012), 3rd edition, Elsevier, United States of America. 2.
- 2 Giuseppe Bonacorso Machine Learning Algorithms 2nd Edition, Packt, 2018.

REFERENCE BOOKS

- 1 Data Mining Techniques, Arun K Pujari, 3rd Edition, Universities Press..
- 2 Data Mining Principles & Applications T.V S veresh Kumar, B. Esware Reddy, Jagadish S Kalimani, Elsevier.

VIDEO LECTURES

1. https://dataminingbook.info/videos/?utm_source=chatgpt.com
2. https://www.classcentral.com/course/youtube-data-mining-crash-course-120604?utm_source=chatgpt.com

WEB RESOURCES

- 1 https://www.cs.purdue.edu/academic-programs/courses/canonical/cs37300.html?utm_source=chatgpt.com
- 2 https://www.uopeople.edu/programs/course/data-mining-and-machine-learning/?utm_source=chatgpt.com
- 3 <https://www.geeksforgeeks.org/data-science/data-mining/>

PROGRAM ELECTIVE

Course Code	Course Title	L	T	P	S	C
25MG201056	OPTIMIZATION TECHNIQUES	3	-	-	-	3
Pre-Requisite	-					
Anti-Requisite	-					
Co-Requisite	-					

COURSE DESCRIPTION: The course on Optimization Techniques provides students with a comprehensive understanding of mathematical and computational methods used to identify optimal solutions for decision-making problems in business, engineering, and management. It emphasizes the formulation of real-world problems into mathematical models and the application of optimization methods to improve efficiency, minimize costs, and maximize outcomes.

COURSE OUTCOMES: After successful completion of the course, students will be able to:

- CO1.** Understand Optimization and Formulation of Linear Programming Models.
- CO2.** Formulate and Solve Transportation & Assignment Models
- CO3.** Understand the sequencing of operations and optimizing.
- CO4.** Discuss the game theory and strategies
- CO5.** Develop networks of activities and find optimal mode of projects evaluation

CO-PO Mapping Table:

Course Outcomes	Program Outcomes						
	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	3	1	1	1	1	2	-
CO2	2	2	3	3	2	2	-
CO3	2	2	2	2	2	-	-
CO4	2	2	2	2	2	-	-
CO5	2	2	2	3	2	-	-
Course Correlation Mapping	2	2	2	3	2	2	-

Correlation Levels: *3: High; 2: Medium; 1: Low*

COURSE CONTENT

Module 1: INTRODUCTION TO OPTIMIZATION TECHNIQUES	(09 Periods)
Meaning, Nature, Scope & Significance of Optimization-Typical applications. The Linear Programming Problem- Introduction, Formulation of Linear Programming problem, Limitations of L.P.P, Graphical method, Simplex method: Maximization and Minimization model (exclude Duality problems), Big-M method.	
Module 2: TRANSPORTATION	(09 Periods)
Introduction, Transportation Model, finding initial basic feasible solutions, Moving towards optimality, Unbalanced Transportation problems, Assignment Problem-Introduction, Mathematical formulation of the problem, Solution of an Assignment problem, Hungarian Algorithm, Multiple Solution, Unbalanced Assignment problems.	
Module 3: SEQUENCING	(09 Periods)
Job sequencing, Johnson's Algorithm for n Jobs and Two machines, n-Jobs and Three Machines, n-jobs through m-machines, Two jobs and m-Machines Problems.	
Module 4: GAME THEORY	(09 Periods)
Concepts, Definitions and Terminology, Two Person Zero Sum Games, Pure Strategy Games (with Saddle Point), Principle of Dominance, Mixed Strategy Games (Game without Saddle Point), Significance of Game Theory in Managerial Application.	
Module 5: NETWORK-PERT ANALYSIS	(09 Periods)
Network Analysis-Definition-objectives-Rules for constructing network Diagram-Determining Critical Path-Earliest & Latest Times-Floats-Application of CPM and PERT techniques in Project Planning and Control – PERT Vs CPM. (Exclude Project Crashing).	

Total Periods:45

EXPERIENTIAL LEARNING

- 1 Case study analysis using real-world transportation problems.
- 2 To impart different optimization models under typical situations in the business organization, like transportation, assignment
- 3 To develop networks of activities of projects and to find out optimal modes of completing projects using network modeling evaluation techniques.

RESOURCES

TEXT BOOKS:

- 1 "Operations Research", R.Pannerselvam, PHI Publications.
- 2 "Operations Research", S.D.Sharma, Kedarnath
- 3 "Operations Research", A. M. Natarajan, P. Balasubramani, Tamilarasi, Pearson Education

REFERENCE BOOKS:

- 1 "Quantitative Techniques in Management", N.D.Vohra, McGraw-Hill, 4th Edition, 2011.
- 2 "Introduction", Hiller & Liebermann, TMH.
- 3 "Operations Research: Methods & Problems", Maurice Saseini, ArhurYaspan&Lawrence Friedman, Pearson

WEB RESOURCES:

- 1 https://onlinecourses.swayam2.ac.in/cec20_ma10/preview
- 2 https://onlinecourses.nptel.ac.in/noc20_ma23/preview
- 3 https://onlinecourses.nptel.ac.in/noc19_ma29/preview

SPECIALIZATION ELECTIVE

Course Code	Course Title	L	T	P	S	C
25MG202006	ADVANCED EXCEL FOR BUSINESS ANALYTICS	2	-	2	-	3
Pre-Requisite	-					
Anti-Requisite	-					
Co-Requisite	-					

COURSE DESCRIPTION: This course makes the student Understand and Identify the principles of data analysis, build presentation-ready dashboards in Excel, Apply analysis techniques to datasets in Excel, become adept at using Excel functions and techniques for analysis

COURSE OUTCOMES: After successful completion of the course, students will be able to:

- CO1.** Understand the basic concept of Excel for data analysis.
- CO2.** Perform various visualization tools for data presentation.
- CO3.** Present Pivot tables in all the forms and views.
- CO4.** Analyse the data using descriptive and inferential statistics.
- CO5.** Perform time series techniques and optimization tools using excel.

CO-PO-PSO Mapping Table:

Course Outcomes	Program Outcomes						
	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	3	2	-	1	-	-	-
CO2	2	3	-	2	1	-	-
CO3	2	3	-	2	1	-	-
CO4	3	3	-	3	-	2	-
CO5	3	3	-	2	2	2	2
Course Correlation Mapping	3	3	-	2	1	2	2

Correlation Levels: **3: High;** **2: Medium;** **1: Low**

COURSE CONTENT

Module 1: INTRODUCTION	(06 Periods)
About Excel & Microsoft, Uses of Excel, Excel software, Spreadsheet window pane, Title Bar, Menu Bar, Standard Toolbar, Formatting Toolbar, the Ribbon, File Tab, Formula Bar, Status Bar, Task Pane, Workbook & sheets	
Module 2: VISUALIZATION TOOLS	(06 Periods)
Creating Charts, Different types of charts, Formatting Chart Objects, Changing the Chart Type, Showing and Hiding the Legend, Showing and Hiding the Data Table	
Module 3: PIVOT TABLES	(06 Periods)
Creating PivotTables, manipulating a PivotTable, Using the PivotTable Toolbar, Changing Data Field, Properties, displaying a PivotChart, Setting PivotTable Options. Adding Subtotals to PivotTables	
Module 4: DATA ANALYSIS	(06 Periods)
Using Formulas, Formula Functions – Sum, Average, if, Count, max, min, Proper, Upper, Lower, Using AutoSum, Correlation, Regression, ANOVA, t-test, chi-square test, random numbers	
Module 5: SOLVER	(06 Periods)
Excel solver, Time series introduction, 20, 50, 100, 200-day moving averages, sales forecasting, linear programming – simplex, transportation, assignments	
	Total Periods:30

EXPERIENTIAL LEARNING

1. Excell data analysis tool pack add-in process.
2. Formatting, manipulating, editing, outliers, cleaning, and coding data in Excel.
3. Present the selected data in a graph and charts and prepare a dashboard.
4. Perform the descriptive statistics for the given research data
5. Run the correlation and regression analysis to test the hypothesis.
6. Collect the data that can be used to run t-test, z-test, and ANOVA
7. Run the chi-square test between the subjects wherein the data is collected
8. Demonstrate how the solver is used to solve optimization problems

RESOURCES

REFERENCE BOOKS:

1. Winston, W. L. (2023). Microsoft Excel data analysis and business modeling (7th ed.). Microsoft Press.
2. Alexander, M., & Kusleika, D. (2022). Excel 2021 Bible (1st ed.). Wiley.

VIDEO LECTURES:

1. NPTEL :: Management - NOC: Introduction to Data analytics
2. (1) Data Visualization With Excel | Edureka - YouTube
3. Optimization of a function using Excel Solver - YouTube

WEB RESOURCES:

1. <https://open.umn.edu/opentextbooks/textbooks/70>
2. <https://corporatefinanceinstitute.com/resources/ebooks/financial-modeling-best-practices-ebook/>

PROGRAM ELECTIVE

Course Code	Course Title	L	T	P	S	C						
25MG202007	DATA VISUALIZATION USING TABLEAU	2	-	2	-	3						
Pre-Requisite	-											
Anti-Requisite	-											
Co-Requisite	-											
COURSE DESCRIPTION: This course introduces students to the principles and practices of data visualization with Tableau. It emphasizes transforming raw data into meaningful insights through dashboards, charts, and visual analytics. Students will develop skills in creating interactive and dynamic visualizations to support effective business decision-making.												
COURSE OUTCOMES:												
CO1.	Understand the fundamentals of data visualization and the role of Tableau in business analytics.											
CO2.	Apply visualization techniques to analyze, interpret, and present business data effectively.											
CO3.	Develop interactive dashboards and advanced charts to communicate insights.											
CO4.	Integrate data from multiple sources and apply advanced Tableau functionalities.											
CO5.	Evaluate visualization effectiveness and design business intelligence reports for decision-making.											

CO-PO Mapping Table:

Course Outcomes	Program Outcomes						
	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	3	1	1	1	1	2	-
CO2	2	2	3	3	2	2	-
CO3	2	2	2	2	2	-	-
CO4	2	2	2	2	2	-	-
CO5	2	2	2	3	2	-	-
Course Correlation Mapping	2	2	2	3	2	2	-

Correlation Levels: *3: High; 2: Medium; 1: Low*

COURSE CONTENT

Module 1:	INTRODUCTION TO DATA VISUALIZATION AND TABLEAU	(06 Periods)
An overview of data visualization concepts, principles of effective visualization, and an introduction to Tableau interface and architecture. Students will learn how Tableau fits into the broader field of business intelligence.		
Module 2:	WORKING WITH DATA AND BASIC VISUALIZATIONS	(06 Periods)
Data connection, data preparation, and cleaning in Tableau. Students will create basic charts such as bar charts, line charts, pie charts, and tables to explore business data.		
Module 3:	ADVANCED VISUALIZATIONS AND CALCULATIONS	(06 Periods)
Advanced visualization techniques, including maps, scatter plots, tree maps, and dual-axis charts. It also introduces calculated fields, parameters, and quick table calculations for dynamic analysis.		
Module 4:	DASHBOARDS, STORYTELLING, AND INTERACTIVITY	(06 Periods)
Creation of dashboards and stories in Tableau. Students will design interactive dashboards with filters, actions, and parameters, and apply storytelling techniques to present insights effectively.		
Module 5:	ADVANCED FEATURES AND INDUSTRY APPLICATIONS	(06 Periods)
Advanced Tableau features such as level of detail (LOD) expressions, forecasting, clustering, and integration with R/Python. Students will apply Tableau to real-world business case studies across marketing, finance, operations, and HR analytics.		
Total Periods:30		

EXPERIENTIAL LEARNING

1	Hands-on practice with Tableau software using real datasets.
2	Case study analysis of business problems using Tableau dashboards.
3	Mini-project on developing a business intelligence report for decision-making.

RESOURCES

TEXT BOOKS:	
1.	Murray, D. Tableau Your Data!: Fast and Easy Visual Analysis with Tableau Software. Wiley.
2.	Sohoni, S. Tableau 10 Business Intelligence Cookbook. Packt Publishing.
3.	Sharma, M. Learning Tableau: Tools for Business Intelligence, Data Prep, and Visual Analytics. Packt Publishing.
REFERENCE BOOKS:	
1.	Gohil, S. Tableau Data Visualization Cookbook. Packt Publishing.
2.	Chaudhuri, S. Mastering Tableau. Packt Publishing.
3.	Jones, J. Getting Started with Tableau. O'Reilly Media
VIDEO LECTURES:	
1.	Tableau Official YouTube Channel – Tutorials and Webinars.
2.	NPTEL – Data Analytics with Tableau
WEB RESOURCES:	
1.	https://www.tableau.com/learn/training
2.	https://public.tableau.com/en-us/s/gallery
3.	https://www.datacamp.com/courses/introduction-to-tableau
4.	https://towardsdatascience.com/tagged/tableau
5.	https://www.kaggle.com/learn/data-visualization

SPECIALIZATION ELECTIVE

Course Code	Course Title	L	T	P	S	C						
25MG203001	SUPPLY CHAIN ANALYTICS	2	-	-	4	3						
Pre-Requisite	-											
Anti-Requisite	-											
Co-Requisite	-											
COURSE DESCRIPTION: This course aims to provide MBA students specializing in Business Analytics with a comprehensive understanding of supply chain analytics. It leverages data-driven techniques, analytical models, and digital tools to optimize supply chain decision-making. Students will learn to apply predictive, prescriptive, and descriptive analytics to solve complex supply chain problems and enhance organizational competitiveness.												
COURSE OUTCOMES: After successful completion of the course, students will be able to:												
CO1.	Understand the fundamentals of supply chain management and the role of analytics in enhancing efficiency.											
CO2.	Apply descriptive, predictive, and prescriptive analytics to supply chain processes.											
CO3.	Use analytical models and tools for demand forecasting, inventory management, and logistics optimization.											
CO4.	Evaluate and apply advanced analytics for supplier selection, risk management, and sustainability.											
CO5.	Integrate digital technologies such as AI, ML, and blockchain into supply chain analytics for decision support.											

CO-PO Mapping Table:

Course Outcomes	Program Outcomes						
	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	3	1	1	1	1	2	-
CO2	2	2	3	3	2	2	-
CO3	2	2	2	2	2	-	-
CO4	2	2	2	2	2	-	-
CO5	2	2	2	3	2	-	-
Course Correlation Mapping	2	2	2	3	2	2	-

Correlation Levels: *3: High; 2: Medium; 1: Low*

COURSE CONTENT

Module 1: INTRODUCTION TO SUPPLY CHAIN ANALYTICS (06 Periods)

Introduces the fundamentals of supply chain management and the role of analytics in decision-making. It highlights data sources, quality challenges, and key performance indicators (KPIs) for supply chain efficiency.

Module 2: DESCRIPTIVE ANALYTICS IN SUPPLY CHAINS (06 Periods)

Descriptive analytics provides insights into supply chain performance. Students learn about visualization tools, dashboards, benchmarking methods, and real-world applications.

Module 3: PREDICTIVE ANALYTICS IN SUPPLY CHAINS (06 Periods)

Forecasting techniques such as regression, time-series, and machine learning. Applications in demand forecasting, inventory optimization, and logistics planning are emphasized.

Module 4: PRESCRIPTIVE ANALYTICS IN SUPPLY CHAINS (06 Periods)

Optimisation and simulation approaches to supply chain planning. Students explore network design, route optimization, procurement, and production planning case studies.

Module 5: EMERGING TECHNOLOGIES AND APPLICATIONS (06 Periods)

AI, ML, and blockchain applications in supply chains. It also covers sustainability, risk management, IoT, and digital transformation trends in supply chain analytics.

Total Periods:30

EXPERIENTIAL LEARNING

1. Case study analysis using real-world supply chain datasets.
2. Hands-on lab sessions with analytics software (R/R/Python/Tableau/Power BI).
3. Group projects on designing data-driven supply chain strategies

RESOURCES

TEXT BOOKS:

1. Chopra, S. & Meindl, P. Supply Chain Management: Strategy, Planning, and Operation. Pearson.
2. Shapiro, J. Modelling the Supply Chain. Duxbury Press.
3. Harrison, A. & van Hoek, R. Logistics Management and Strategy. Pearson.

REFERENCE BOOKS:

1. Watson, M., Lewis, S., Cacioppi, P., & Jayaraman, J. Supply Chain Network Design: Applying Optimisation and Analytics to the Global Supply Chain. FT Press.
2. Simchi-Levi, D., Kaminsky, P., & Simchi-Levi, E. Designing and Managing the Supply Chain: Concepts, Strategies and Case Studies. McGraw-Hill.
3. Hugos, M. Essentials of Supply Chain Management. Wiley.

VIDEO LECTURES:

1. MIT OpenCourseWare – Supply Chain Analytics Lectures.
2. NPTEL – Supply Chain Analytics and Management.

WEB RESOURCES:

1. <https://www.supplychainquarterly.com/>
2. <https://cscmp.org/>
3. <https://www.sciencedirect.com/journal/journal-of-supply-chain-management>
4. <https://www.informs.org/>
5. <https://hbr.org/topic/supply-chain>

SPECIALIZATION ELECTIVE

Course Code	Course Title	L	T	P	S	C
25MG201057	STATISTICS FOR ANALYTICS	3	-	-	-	3
Pre-Requisite	-					
Anti-Requisite	-					
Co-Requisite	-					

COURSE DESCRIPTION: This course introduces key statistical methods for decision-making, including hypothesis testing, two-sample comparisons, goodness-of-fit, and nonparametric techniques. It emphasizes the design and analysis of single-factor and multi-factor experiments to address real-world problems. Students will develop skills in applying statistical tools, interpreting results, and drawing meaningful conclusions for research and practice.

COURSE OUTCOMES: After successful completion of the course, students will be able to:

- CO1.** Apply the concepts of hypothesis testing for single-sample problems, including tests on means, variances, and proportions, using appropriate statistical procedures.
- CO2.** Analyse and interpret two-sample inference problems (means, variances, proportions) and perform paired comparisons using t-tests.
- CO3.** Evaluate categorical data using goodness-of-fit tests, contingency table analysis, and nonparametric procedures such as sign tests, Wilcoxon tests, and runs tests.
- CO4.** Design and analyse single-factor experiments using ANOVA, randomized block designs, and random-effects models to draw valid inferences
- CO5.** Construct and interpret multi-factor experimental designs, including factorial and (2^k) designs, to study interaction effects and optimize decision-making.

CO-PO Mapping Table:

Course Outcomes	Program Outcomes						
	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	3	2	-	-	-	-	3
CO2	-	3	-	-	2	-	-
CO3	-	2	-	2	2	-	-
CO4	-	2	2	-	2	-	-
CO5	-	2	3	-	2	2	-
Course Correlation Mapping	3	2	3	2	2	2	3

Correlation Levels: *3: High; 2: Medium; 1: Low*

COURSE CONTENT

Module 1: FUNDAMENTALS OF HYPOTHESIS TESTING

(09 Periods)

Tests of Hypotheses for a Single Sample-Tests of Statistical Hypotheses, One-Sided and Two-Sided Hypotheses, P-Values in Hypothesis Tests, General Procedure for Hypothesis Tests, Tests on the Mean of a Normal Distribution, Variance Known- Tests on the Mean of a Normal Distribution, Variance Unknown- Tests on the Variance and Standard Deviation of a Normal Distribution- Tests on a Population Proportion

Module 2: TWO-SAMPLE HYPOTHESIS TESTING

(09 Periods)

Statistical Inference for Two Samples -Inference on the Difference in Means of Two Normal Distributions, Variances Known- Inference on the Difference in Means of two Normal Distributions, Variances Unknown- Paired t-Test- Inference on the Variances of Two Normal Distributions- Inference on Two Population Proportions

Module 3: GOODNESS-OF-FIT AND NONPARAMETRIC STATISTICAL METHODS

(09 Periods)

Goodness of Fit Tests and Categorical Data Analysis - Goodness of Fit Tests When all Parameters are Specified- Goodness of Fit Tests When Some Parameters are Unspecified - Tests of Independence in Contingency Tables- Tests of Independence in Contingency Tables Having Fixed Marginal Totals- The Kolmogorov-Smirnov Goodness of Fit Test for Continuous Data. Nonparametric Procedures -The Sign Test, The Wilcoxon Signed-Rank Test, Comparison to the t-Test, Equivalence Testing- The Runs Test for Randomness.

Module 4: DESIGN AND ANALYSIS OF SINGLE-FACTOR EXPERIMENTS

(09 Periods)

Design and Analysis of Single-Factor Experiments: The Analysis of Variance-Designing Engineering Experiments, Completely Randomized Single-Factor Experiment, The Random-Effects Model, Randomized Complete Block Design.

Module 5: DESIGN AND ANALYSIS OF MULTI-FACTOR EXPERIMENTS

(09 Periods)

Design of Experiments with Several Factors-Introduction, Factorial Experiments, Two-Factor Factorial Experiments, General Factorial Experiments, 2kFactorial Designs.

Total Periods:45

EXPERIENTIAL LEARNING

1. Ask them to apply Chi-square goodness of fit tests and tests of independence in contingency tables, then interpret the results in terms of decision-making
2. Use R, SPSS, or Excel to simulate datasets where parameters are specified/unspecified.
3. Divide students into groups and assign them to design a small experiment (e.g., testing the effectiveness of two teaching methods or comparing customer satisfaction between two products).

RESOURCES

TEXT BOOKS

1. Douglas C. Montgomery and George C. Runger, Applied Statistics and Probability for Engineers, (2005) John Wiley and Sons Inc.
2. Sheldon. M. Ross: Probability and Statistics for Engineers and Scientists, MaGraw-Hill, 2004.
3. Ravichandran, J. Probability and Statistics for engineers, First Reprint Edition, Wiley India, 2012.

REFERENCE BOOKS:

1. Introduction to the Practice of Statistics by Moore, McCabe & Craig (widely used for hypothesis testing basics)
2. Comparative Statistical Inference by Vic Barnett (Wiley Series in Probability and Statistics).
3. Goodness-of-Fit Tests and Model Validity by Huber-Carol.

WEB RESOURCES:

1. Hypothesis Testing: One Sample (NPS Faculty Book)
Hypothesis Testing with One Sample – Quantitative Analysis for Business
2. Buy Design and Analysis of Experiments, Tenth Edition EMEA Edition Book Online at Low Prices in India | Design and Analysis of Experiments, Tenth Edition EMEA Edition Reviews & Ratings - Amazon.in

VIDEO RESOURCES:

1. Lesson: One Sample Hypothesis Testing – step-by-step Z and t-tests.
2. Hypothesis Testing EXPLAINED – conceptual clarity.
3. Pearson's chi square test (goodness of fit) – Khan Academy explanation.

SPECIALIZATION ELECTIVE

Course Code	Course Title	L	T	P	S	C
25MG202010	DATA ANALYTICS USING CLOUD TECHNOLOGY	2	-	2	-	3
Pre-Requisite	-					
Anti-Requisite	-					
Co-Requisite	-					

COURSE DESCRIPTION: This course introduces students to the concepts, tools, and techniques of data analytics using cloud platforms. It emphasizes practical applications of cloud-based solutions for handling large datasets, performing advanced analytics, and deriving actionable business insights. Students will gain exposure to cloud service providers such as AWS, Microsoft Azure, and Google Cloud, enabling them to understand how organizations leverage cloud technologies for scalable, cost-effective, and efficient analytics.

COURSE OUTCOMES: After successful completion of the course, students will be able to:

- CO1.** Understand the fundamentals of data analytics and cloud computing concepts.
- CO2.** Apply cloud-based tools and services for data storage, processing, and visualization.
- CO3.** Analyze structured and unstructured data using cloud analytics techniques.
- CO4.** Design and implement business intelligence solutions on cloud platforms.
- CO5.** Evaluate the role of cloud-enabled analytics in decision-making and strategic management.

CO-PO Mapping Table:

Course Outcomes	Program Outcomes						
	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	3	1	1	1	1	2	-
CO2	2	2	3	3	2	2	-
CO3	2	2	2	2	2	-	-
CO4	2	2	2	2	2	-	-
CO5	2	2	2	3	2	-	-
Course Correlation Mapping	2	2	2	3	2	2	-

Correlation Levels: *3: High; 2: Medium; 1: Low*

COURSE CONTENT

Module 1: INTRODUCTION TO DATA ANALYTICS & CLOUD COMPUTING (06 Periods)

Overview of Data Analytics: descriptive, predictive, and prescriptive. Basics of cloud computing: service models (IaaS, PaaS, SaaS) and deployment models (public, private, hybrid). Benefits and challenges of cloud-based analytics. Case studies in business applications.

Module 2: CLOUD PLATFORMS FOR DATA ANALYTICS (06 Periods)

Introduction to major cloud providers: AWS, Azure, Google Cloud. Cloud storage solutions: Amazon S3, Azure Blob, Google Cloud Storage. Data warehousing in the cloud: Redshift, Big Query, Snowflake. Integration of on-premises and cloud analytics

Module 3: DATA PROCESSING AND MANAGEMENT ON THE CLOUD (06 Periods)

ETL (Extract, Transform, and Load) processes on the cloud. Cloud-based databases: Amazon RDS, Azure SQL, Google Cloud SQL. Handling big data: Hadoop, Spark, Databricks on the cloud. Data governance, privacy, and security in cloud analytics.

Module 4: CLOUD-BASED ANALYTICAL TOOLS AND TECHNIQUES (06 Periods)

Machine learning as a service (MLaaS) on AWS, Azure, GCP. Real-time analytics and streaming data (Amazon Kinesis, Azure Stream Analytics, Google Pub/Sub) Visualization and dash boarding: Power BI, Tableau, Google Data Studio integration with cloud platforms. Predictive analytics for business decision-making

Module 5: APPLICATIONS, TRENDS, AND CASE STUDIES (06 Periods)

Applications of cloud analytics in finance, marketing, supply chain, HR, and operations.

Emerging trends: AI-driven analytics, edge computing, serverless analytics. Cloud cost optimization strategies. Industry case studies and project presentations

Total Periods:30

EXPERIENTIAL LEARNING

- 1 Students will be able to apply cloud-based analytics tools (AWS, Azure, GCP) to real-world business problems, making them industry-ready for roles in business analytics, data science, and consulting.
- 2 Learners will demonstrate the ability to use cloud platforms for solving complex organizational problems such as customer insights, risk analysis, financial forecasting, and supply chain optimization.
- 3 Learners will recognize the importance of data privacy, governance, and compliance while working with cloud-based data analytics, ensuring ethical and responsible use of data.

RESOURCES

REFERENCE TEXT BOOKS:

- 1 Rajkumar Buyya, Christian Vecchiola, and Thamarai Selvi – Mastering Cloud Computing: Foundations and Applications Programming, McGraw Hill.
- 2 Foster Provost & Tom Fawcett – Data Science for Business, O'Reilly Media.
- 3 Srinivasan, S. – Cloud Computing: A Practical Approach for Learning and Implementation, Pearson.

WEB RESOURCES:

- 1 **AWS Training & Certification:** <https://aws.amazon.com/training>
- 2 **Microsoft Learn (Azure):** <https://learn.microsoft.com/en-us/training/>
- 3 **Google Cloud Training:** <https://cloud.google.com/training>

SPECIALIZATION ELECTIVE

Course Code	Course Title	L	T	P	S	C
25MG202011	DATA ANALYSIS WITH R	3	-	-	-	3
Pre-Requisite	-					
Anti-Requisite	-					
Co-Requisite	-					

COURSE DESCRIPTION: This course provides a comprehensive introduction to data analysis using R programming. Students will learn data manipulation, visualization, and statistical modeling techniques with practical applications. The course emphasizes real-world problem-solving through exploratory data analysis, hypothesis testing, regression, and predictive modeling.

COURSE OUTCOMES:

- CO1** Understand the fundamentals of R programming and its application in business analytics.
- CO2** Apply data manipulation and cleaning techniques using R libraries.
- CO3** Perform exploratory data analysis and create effective visualizations using R.
- CO4** Apply statistical models, hypothesis testing, and regression analysis in R.
- CO5** Use advanced R techniques for predictive analytics and machine learning applications.

CO-PO Mapping Table:

Course Outcomes	Program Outcomes						
	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	3	1	1	1	1	2	-
CO2	2	2	3	3	2	2	-
CO3	2	2	2	2	2	-	-
CO4	2	2	2	2	2	-	-
CO5	2	2	2	3	2	-	-
Course Correlation Mapping	2	2	2	3	2	2	-

Correlation Levels: *3: High; 2: Medium; 1: Low*

COURSE CONTENT

Module 1: INTRODUCTION TO R AND DATA STRUCTURES **(09 Periods)**

Introduction with R programming, RStudio interface, and data structures such as vectors, lists, matrices, and data frames. Students will also learn data import and export functions for handling business datasets.

Module 2: DATA MANIPULATION AND CLEANING **(09 Periods)**

Data manipulation techniques using DPLYR and TIDYR. Students will learn filtering, grouping, summarizing, reshaping data, and handling missing values for analysis.

Module 3: DATA VISUALIZATION WITH R **(09 Periods)**

Visual analytics using ggplot2 and other R packages. Students will create bar charts, histograms, scatter plots, and advanced visualizations for business insights.

Module 4: STATISTICAL ANALYSIS AND MODELING **(09 Periods)**

Hypothesis testing, ANOVA, correlation, and regression analysis. Students will apply linear and multiple regression models to business datasets.

Module 5: PREDICTIVE ANALYTICS AND ADVANCED TOPICS **(09 Periods)**

Classification, clustering, and machine learning algorithms in R. Students will also learn text mining, time series forecasting, and integrating R with other business intelligence tools.

Total Periods:45

EXPERIENTIAL LEARNING

1. Hands-on lab sessions with R programming using real business datasets.
2. Case study analysis applying R techniques to solve management problems.
3. Mini-project on predictive modeling and business forecasting using R.

RESOURCES

TEXT BOOKS:

1. Kabacoff, R. I. *R in Action: Data Analysis and Graphics with R*. Manning Publications.
2. Grolemund, G., & Wickham, H. *R for Data Science*. O'Reilly Media.
3. Dalgaard, P. *Introductory Statistics with R*. Springer.

REFERENCE BOOKS:

1. Venables, W.N. & Ripley, B.D. *Modern Applied Statistics with S*. Springer.
2. Field, A., Miles, J., & Field, Z. *Discovering Statistics Using R*. Sage Publications.
3. Everitt, B.S. & Hothorn, T. *A Handbook of Statistical Analyses Using R*. Chapman & Hall/CRC.

VIDEO LECTURES:

1. NPTEL – Data Science using R.
2. Coursera – R Programming by Johns Hopkins University.

WEB RESOURCES:

1. <https://www.r-project.org/>
2. <https://cran.r-project.org/>
3. <https://www.datacamp.com/courses/free-introduction-to-r>
4. <https://www.kaggle.com/learn/r>
5. <https://r4ds.had.co.nz/>

UNIVERSITY ELECTIVE

Course Code	Course Title	L	T	P	S	C
25AI201701	BUSINESS ANALYTICS	3	-	-	-	3
Pre-Requisite	-					
Anti-Requisite	-					
Co-Requisite	-					

COURSE DESCRIPTION: This course emphasizes on the basic concepts of Business Analytics. It covers the basic excel skills, Excel look up functions for database queries in business analytics. By the end of this course students will acquire basic knowledge to implement statistical methods for performing descriptive, predictive and prescriptive analytics.

COURSE OUTCOMES: After successful completion of the course, students will be able to:

- CO1.** Understand the basic concepts and models of Business Analytics
- CO2.** Select a Suitable basic Excel function to perform analytics on spread sheets.
- CO3.** Apply different statistical techniques and distributions for modeling the data
- CO4.** Develop user-friendly Excel applications by utilizing statistical models for effective decision-making.
- CO5.** Analyze the performance of different optimization models used in prescriptive analytics on Binary and Categorical data.

CO-PO Mapping Table:

Course Outcomes	Program Outcomes						
	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	2	1	-	-	-	-	-
CO2	2	3	-	-	-	-	-
CO3	2	2	-	-	3	-	-
CO4	1	1	-	-	-	-	-
CO5	-	-	-	-	-	-	-
Course Correlation Mapping	2	2	3	-	3	-	-

Correlation Levels: **3: High; 2: Medium; 1: Low**

COURSE CONTENT

Module 1: FOUNDATIONS OF BUSINESS ANALYTICS (09 Periods)

Introduction, What is Business Analytics, Evolution of Business Analytics, Scope of Business Analytics, Data for Business Analytics, Applications of Business Analytics, Models in Business Analytics, Problem Solving with Analytics.

Module 2: ANALYTICS ON SPREADSHEETS (09 Periods)

Basic Excel Skills, Excel Functions, Using Excel Lookup Functions for Database Queries, Spreadsheet Add-Ins for Business Analytics.

Visualizing and Exploring Data: Data Visualization, Creating Charts In Microsoft Excel, Other Excel Data Visualization, Statistical Methods For Summarizing Data, Exploring Data Using Pivot tables.

Module 3: DATA MODELING (09 Periods)

Basic concepts of Probability, Random Variables and Probability Distributions, Continuous Probability Distributions.

Statistical Sampling, Estimation population parameters, Sampling Error, Sampling Distributions, Hypothesis Testing, ANOVA, Chi Square Test.

Module 4: PREDICTIVE ANALYTICS (09 Periods)

Trend lines And Regression Analysis, Modeling Relationships And Trends In Data, Simple Linear Regression, Multiple Linear Regression, Building Good Regression Models, Strategies for predictive decision modeling, implementing models on spreadsheets, spreadsheet applications in business analytics, developing user-friendly excel applications, analysing uncertainty and model assumptions, model analysis using analytic solver platform

Module 5: PRESCRIPTIVE ANALYTICS (09 Periods)

Linear Models: Building Linear Models, Implementing Linear Optimization Models On Spreadsheets, Graphical Interpretation Of Linear Optimization, Linear Optimization Models for prediction and Insight.

Integer Models: Solving models with Integer Variables, Integer Optimization Models with Binary Numbers

Decision Analysis: Formulating Decision Problems, Decision Strategies Without Outcome Probabilities, Decision Trees With Outcome Probabilities, Decision Trees.

Total Periods: 45

EXPERIENTIAL LEARNING

1. **Diabetic Prediction:**

The National Institute of Diabetes and Digestive and Kidney Diseases has created a dataset. The objective of the dataset is to diagnostically predict whether or not a patient has diabetes, based on certain diagnostic measurements included in the dataset. Several constraints were placed on the selection of these instances from a larger database. In particular, all patients here are females at least 21 years old of Pima Indian heritage. The dataset consists of several medical predictor variables and one target variable, Outcome. Predictor variables include the number of pregnancies the patient has had, their BMI, insulin level, age, and so on. Build a machine learning model to accurately predict whether or not the patients in the dataset have diabetes or not?

2. Solve the house price prediction problem using **Linear regression analysis** method. Optimize the parameters of the regression function using gradient descent method.
3. Visualize the decision tree built for solving Heart disease prediction problem and measure the impurity of nodes created via **Decision Tree Analysis**.

Dataset: <https://www.kaggle.com/arviinndn/heart-disease-prediction-uci-dataset/data>

4. The data set baby boom (Using R) contains data on the births of 44 children in a one-day period at a Brisbane, Australia, hospital. Compute the skew of the wt variable, which records birth weight. Is this variable reasonably symmetric or skewed?
5. Visualize the **Distribution of data** with different feature scaling methods on online news popularity dataset for article word count.
Dataset: <https://www.kaggle.com/datasets/deepakshende/onlinenewspopularity>

6. **Human Activity Recognition System:**

The human activity recognition system is a classifier model that can identify human fitness activities. To develop this system, you have to use a smart phone dataset, which contains the fitness activity of 30 people which is captured through smart phones. This system will help you to understand the solving procedure of the **Multi-classification problem**.

RESOURCES

TEXT BOOKS:

1. James Evans, Business Analytics, Pearson Education, 2nd Edition, 2017.

REFERENCE BOOKS:

1. Marc J. Schniederjans, Business Analytics, Pearson Education, 2015
2. Camm, Cochran, Essentials of Business Analytics, Cengage Learning, 2015

VIDEO LECTURES:

1. <https://nptel.ac.in/courses/110105089>
2. <https://archive.nptel.ac.in/courses/110/107/110107092/>
3. <https://nptel.ac.in/courses/110106050>

WEB RESOURCES:

1. <https://www.proschoolonline.com/certification-business-analytics-course/what-is-ba>
2. https://michael.hahsler.net/SMU/EMIS3309/slides/Evans_Analytics2e_ppt_01.pdf
3. <https://www.guru99.com/business-analyst-tutorial-course.html>

UNIVERSITY ELECTIVE

Course Code	Course Title	L	T	P	S	C
25AI201702	ETHICS FOR AI	3	-	-	-	3
Pre-Requisite	-					
Anti-Requisite	-					
Co-Requisite	-					

COURSE DESCRIPTION:

Recognize the fundamental ideas and standards of AI ethics. Recognizing fairness and prejudice in artificial intelligence. Obstacles to obtaining explainability and openness. Frameworks based on ethics and the law that designate accountability. Privacy and security concerns related to AI ethics. Ethics in AI in the future.

COURSE OUTCOMES: At the end of the course, student will be able to:

- CO1.** Understand the basic concepts of AI Ethics and ethical principles.
- CO2.** Understanding the concept of bias and fairness in AI.
- CO3.** Challenges in achieving the transparency and explainability.
- CO4.** Legal and ethical frameworks for assigning responsibility.
- CO5.** Security and privacy issues of AI Ethics. Future of AI ethics.

CO-PO Mapping Table

Course Outcomes	Program Outcomes						
	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	3	3	2	-	-	-	-
CO2	3	3	3	-	-	-	-
CO3	3	3	-	-	-	-	-
CO4	2	3	3	-	-	-	-
CO5	-	-	-	3	-	-	-
Course Correlation Mapping	3	3	3	3	-	-	-

Correlation Levels: **3: High; 2: Medium; 1: Low**

COURSE CONTENT

MODULE 1: INTRODUCTION TO AI ETHICS

(09 Periods)

Overview of ethical issues in AI. Historical context and key concepts. Importance of ethical considerations in AI development and deployment.

Ethical Principles and Frameworks:

Utilitarianism, deontology, virtue ethics, and other ethical theories. Ethical principles for AI, such as fairness, transparency, accountability, and privacy.

MODULE 2: BIAS AND FAIRNESS IN AI

(09 Periods)

Understanding bias in AI systems. Types of bias (e.g., algorithmic bias, dataset bias). Approaches to detecting and mitigating bias. Fairness metrics and fairness-aware machine learning algorithms.

MODULE 3: TRANSPARENCY AND EXPLAINABILITY

(09 Periods)

Importance of transparency and explainability in AI. Techniques for explaining AI decisions. Challenges and trade-offs in achieving transparency and explainability. Regulatory requirements and guidelines for transparent AI systems.

MODULE 4: ACCOUNTABILITY AND RESPONSIBILITY

(09 Periods)

Holding AI developers, users, and organizations accountable for AI systems' actions. Legal and ethical frameworks for assigning responsibility. Challenges in attributing responsibility in complex AI systems.

MODULE 5: PRIVACY AND DATA PROTECTION

(09 Periods)

Privacy issues in AI, including data collection, storage, and sharing. Privacy-preserving AI techniques. Regulatory frameworks (e.g., GDPR) and ethical guidelines for data protection in AI. Ethical considerations in emerging AI technologies.

Total Periods: 45

EXPERIENTIAL LEARNING

Case -1: Emergence of Bias and Fairness Interventions

For the problem of Loan Approval and Hiring by AI, specify the steps and practices to the entry of bias and fairness improvement interventions.

Case-2: AI governance with critical thinking, negotiation skills, and a multi-stakeholder perspective

Undertake the study from ethical perspective for the problem of Public response system, Policy making and Contract negotiation.

(Note: It's an indicative one. Course Instructor may change activities and shall be reflected in course Handout)

RESOURCES

TEXT BOOKS:

1. Müller, Vincent C., Ethics of Artificial Intelligence and Robotics. The Stanford Encyclopedia of Philosophy, 2021.
2. Meredith Broussard, Artificial Unintelligence: How Computers Misunderstand the World, Cambridge, MA: MIT Press, 2018.

REFERENCE BOOKS:

1. Brett Frischmann and Evan Selinger, Re-Engineering Humanity, Cambridge University Press, Cambridge, 2018.
2. Cathy O'Neil, Weapons of Math Destruction: How Big Data Increases Inequality and Threatens Democracy, Crown Publishers, 2016.
3. Shoshana Zuboff, The Age of Surveillance Capitalism, Financial Times, 2020.

VIDEO LECTURES:

1. <https://rainermuehlhoff.de/en/EoAI2025/>
2. https://www.youtube.com/watch?v=qpp1G0iEL_c
3. <https://rainermuehlhoff.de/en/EoAI2025/>

WEB RESOURCES:

1. <https://www.ibm.com/topics/ai-ethics>
2. <https://www.coursera.org/articles/ai-ethics>
3. <https://ai.google/responsibility/principles/>

UNIVERSITY ELECTIVE

Course Code	Course Title	L	T	P	S	C
25CM201701	COST MANAGEMENT OF ENGINEERING PROJECTS	3	-	-	-	3
Pre-Requisite	-					
Anti-Requisite	-					
Co-Requisite	-					

COURSE DESCRIPTION: This course will provide an understanding of the cost tools and techniques that can be used throughout a project's design and development. The students will be exposed to the methods, processes, and tools needed to conduct economic analysis, estimation of Project.

COURSE OUTCOMES: After successful completion of the course, students will be able to:

- CO1.** Understand the costing concepts and their role in decision-making.
- CO2.** Understand the project management concepts and their various aspects in selection.
- CO3.** Interpret costing concepts with project execution.
- CO4.** Knowledge of costing techniques in the service sector and various budgetary control techniques.
- CO5.** Become familiar with quantitative techniques in cost management.

CO-PO Mapping Table:

Course Outcomes	Program Outcomes					
	PO1	PO2	PO3	PO4	PO5	PO6
CO1	-	-	-	-	-	2
CO2	-	-	-	-	-	2
CO3	-	-	-	-	-	2
CO4	-	-	-	-	-	2
CO5	-	-	-	-	-	2
Course Correlation Level	-	-	-	-	-	2

Correlation Levels: *3: High; 2: Medium; 1: Low*

COURSE CONTENT

Module 1: INTRODUCTION TO COSTING CONCEPTS (05 Periods)

Objectives of a Costing System; Cost concepts in decision-making; Relevant cost, Differential cost, Incremental cost, and Opportunity cost; Creation of a Database for operational control.

Module 2: INTRODUCTION TO PROJECT MANAGEMENT (10 Periods)

Project: meaning, Different types, why to manage, cost overruns centers, various stages of project execution: conception to commissioning. Project execution as conglomeration of technical and nontechnical activities, Detailed Engineering activities, Pre-project execution main clearances and documents, Project team: Role of each member, Importance Project site: Data required with significance, Project contracts

Module 3: PROJECT EXECUTION AND COSTING CONCEPTS (10 Periods)

Project execution Project cost control, Bar charts and Network diagram, Project commissioning: mechanical and process, Cost Behavior and Profit Planning Marginal Costing; Distinction between Marginal Costing and Absorption Costing; Break-even Analysis, Cost-Volume-Profit Analysis, Various decision-making problems, Pricing strategies: Pareto Analysis, Target costing, Life Cycle Costing

Module 4: COSTING OF SERVICE SECTOR AND BUDGETARY CONTROL (10 Periods)

Just-in-time approach, Material Requirement Planning, Enterprise Resource Planning, Activity Based Cost Management, Bench Marking; Balanced Score Card and Value-Chain Analysis, Budgetary Control: Flexible Budgets; Performance budgets; Zero-based budgets

Module 5: QUANTITATIVE TECHNIQUES FOR COST MANAGEMENT (10 Periods)

Linear Programming, PERT/CPM, Transportation problems, Assignment problems, Learning Curve Theory.

Total Periods: 45

EXPERIENTIAL LEARNING

1. Prepare a mini-project report regarding cost control techniques in manufacturing units.
2. Prepare a report on real-life engineering project case studies, especially those that faced cost overruns or successfully managed costs
3. Conduct hands-on budgeting exercises where participants are given a project scope, and they have to create detailed budgets.

RESOURCES

TEXT BOOKS:

1. John M. Nicholas, Herman Steyn Project Management for Engineering, Business and Technology, Taylor & Francis, 2 August 2020, ISBN: 9781000092561
2. Albert Lester ,Project Management, Planning and Control, Elsevier/Butterworth-Heinemann, 2007, ISBN: 9780750669566, 075066956X.

REFERENCE BOOKS:

1. Charles T. Horngren et al Cost Accounting a Managerial Emphasis, Prentice Hall of India, New Delhi, 2011.
2. Ashish K. Bhattacharya, Principles & Practices of Cost Accounting A. H. Wheeler publisher, 1991.
3. Vohra N.D., Quantitative Techniques in Management, Tata McGraw Hill Book Co. Ltd, 2007
4. Robert S Kaplan Anthony A. Alkinson, Management & Cost Accounting, 2003

VIDEO LECTURES:

1. <https://www.youtube.com/watch?v=rck3MnC7OXA>
2. <https://www.youtube.com/watch?v=QWD1LMzStI4>

WEB RESOURCES:

1. <https://www.superfastcpa.com/what-are-cost-concepts-in-decision-making>
2. <https://www.indeed.com/career-advice/career-development/project-cost-controls>
3. <https://www.geeksforgeeks.org/difference-between-pert-and-cpm/>

UNIVERSITY ELECTIVE

Course Code	Course Title	L	T	P	S	C
25CE201701	DISASTER MANAGEMENT	3	-	-	-	3
Pre-Requisite	-					
Anti-Requisite	-					
Co-Requisite	-					

COURSE DESCRIPTION: This course provides a detailed discussion on disaster prone areas in India, repercussions of disasters and hazards, disaster preparedness and management, risk assessment and disaster management.

COURSE OUTCOMES: After successful completion of the course, students will be able to:

- CO1.** Analyze the vulnerability of an area to natural and man-made disasters/hazards as per the guidelines to solve complex problems using appropriate techniques ensuring safety, environment and sustainability.
- CO2.** Analyze the causes and impacts of disasters using appropriate tools and techniques and suggest mitigation measures ensuring safety, environment and sustainability besides communicating effectively in graphical form.
- CO3.** Suggest the preparedness measures using appropriate tools and techniques and suggest mitigation measures ensuring safety, environment and sustainability.
- CO4.** Analyze the Risk Assessment using appropriate tools and techniques and suggest mitigation measures ensuring safety, environment and sustainability.
- CO5.** Design disaster management strategies to solve pre, during and post disaster problems using appropriate tools and techniques following the relevant guidelines and latest developments ensuring safety, environment and sustainability besides communicating effectively in graphical form.

CO-PO Mapping Table:

Course Outcomes	Program Outcomes					
	PO1	PO2	PO3	PO4	PO5	PO6
CO1	-	-	-	-	-	2
CO2	-	-	-	-	-	2
CO3	-	-	-	-	-	2
CO4	-	-	-	-	-	2
CO5	-	-	-	-	-	2
Course Correlation Level	-	-	-	-	-	2

Correlation Levels: **3: High;** **2: Medium;** **1: Low**

COURSE CONTENT

Module 1: DISASTER PRONE AREAS IN INDIA (09 Periods)

Introduction: Disaster: Definition, Factors and Significance; Difference Between Hazard and Disaster; Natural and Manmade Disasters: Difference, Nature, Types And Magnitude.

Disaster Prone Areas: Study Of Seismic Zones; Areas Prone To Floods And Droughts, Landslides And Avalanches; Areas Prone To Cyclonic And Coastal Hazards With Special Reference To Tsunami; Post-Disaster Diseases And Epidemics.

Module 2: REPERCUSSIONS OF DISASTERS AND HAZARDS (09 Periods)

Economic Damage, Loss of Human and Animal Life, Destruction of Ecosystem. Natural Disasters: Earthquakes, Volcanisms, Cyclones, Tsunamis, Floods, Droughts And Famines, Landslides And Avalanches, Man-made disaster: Nuclear Reactor Meltdown, Industrial Accidents, Oil Slicks And Spills, Outbreaks Of Disease And Epidemics, War And Conflicts.

Module 3: DISASTER PREPAREDNESS AND MANAGEMENT (11 Periods)

Preparedness: Monitoring Of Phenomena Triggering A Disaster Or Hazard; Evaluation Of Risk: Application Of Remote Sensing, Data From Meteorological And Other Agencies, Media Reports: Governmental And Community Preparedness.

Module 4: RISK ASSESSMENT (08 Periods)

Disaster Risk: Concept and Elements, Disaster Risk Reduction, Global and National Disaster Risk Situation. Techniques of Risk Assessment, Global Co-Operation In Risk Assessment And Warning, People's Participation In Risk Assessment. Strategies for Survival.

Module 5: DISASTER MANAGEMENT (08 Periods)

Disaster management organization and methodology, Disaster management cycle, Disaster management in India – Typical cases and Cost-benefit analysis, Disaster management programs implemented by NGOs and Government of India, Usage of GIS and Remote sensing techniques in disaster management, Leadership and Coordination in Disaster management, Emerging trends in disaster management.

Total Periods: 45

EXPERIENTIAL LEARNING

1. Perform hazard assessment and vulnerability analysis for any nearby town/city and prepare a detailed report of possible impacts of various disasters on environment, infrastructure and development.
2. Prepare a detailed report on the causes and effects of Tsunami that was occurred in the year 2004. Also discuss various advancements in Tsunami warning systems.
3. Identify the major causes of urban floods in cities like Chennai, Hyderabad & Mumbai. Also list various mitigation strategies to reduce the impact of floods.
4. Prepare a detailed report on how various man-made activities are directly/indirectly related to the occurrence of landslides that occurred in recent days in India.
5. Visit AP State Disaster Response and Fire Services Department and record about various methods used by them in mitigating disasters and their management.

RESOURCES

TEXT BOOKS:

1. Sharma V. K., *Disaster Management*, Medtech Publishing, 2nd Edition, 2013.
2. Anand S. Arya, Anup Karanth, and Ankush Agarwal, *Hazards, Disasters and Your Community: A Primer for Parliamentarians*, GOI-UNDP Disaster Risk Management Programme, Government of India, National Disaster Management Division, Ministry of Home Affairs, New Delhi, Version 1.0, 2005

REFERENCE BOOKS:

1. Donald Hyndman and David Hyndman, *Natural Hazards and Disasters*, Cengage Learning, USA, 5th Edition, 2015.
2. *Disaster Management in India*, A Status Report, Ministry of Home Affairs, Govt. of India, May 2011.
3. Rajendra Kumar Bhandari, *Disaster Education and Management: A Joyride for Students, Teachers, and Disaster Managers*, Springer India, 2014.
4. Singh R. B., *Natural Hazards and Disaster Management*, Rawat Publications, 2009.
5. R. Nishith, Singh AK, *Disaster Management in India: Perspectives, issues and strategies*, New Royal book Company.
6. Sahni, PardeepEt.Al. (Eds.), *Disaster Mitigation Experiences And Reflections*, Prentice Hall of India, New Delhi.
7. Goel S. L. , *Disaster Administration And Management Text And Case Studies*, Deep &Deep Publication Pvt. Ltd., New Delhi

VIDEO LECTURES:

1. <https://nptel.ac.in/courses/105104183>
2. <https://www.digimat.in/nptel/courses/video/124107010/L01.html>

WEB RESOURCES:

1. <https://egyankosh.ac.in/handle/123456789/25093>
2. <https://www.egyankosh.ac.in/handle/123456789/25912>
3. <https://www.nios.ac.in/media/documents/333courseE/12.pdf>
4. <https://ndmindia.mha.gov.in/images/public-awareness/Primer%20for%20Parliamentarians.pdf>

UNIVERSITY ELECTIVE

Course Code	Course Title	L	T	P	S	C
25SS201701	VALUE EDUCATION	3	-	-	-	3
Pre-Requisite	-					
Anti-Requisite	-					
Co-Requisite	-					

COURSE DESCRIPTION: This course deals with understanding the value of education and self-development, Imbibe good values in students, and making them know about the importance of character.

COURSE OUTCOMES: After successful completion of the course, students will be able to:

- CO1.** Demonstrate the knowledge of values and self-development
- CO2.** Analyze the importance of the cultivation of values.
- CO3.** Learn suitable aspects of personality and behavioral development
- CO4.** Function as a member and leader in multi-disciplinary teams by avoiding faulty thinking.
- CO5.** Develop character and competence for effective studies.

CO-PO Mapping Table:

Course Outcomes	Program Outcomes						
	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	3	-	-	-	-	-	-
CO2	2	3	-	-	2	-	-
CO3	2	-	-	-	2	-	-
CO4	2	-	-	-	-	-	-
CO5	2	2	-	-	-	-	-
Course Correlation Mapping	2	3	-	-	2	-	-

Correlation Levels: **3: High;** **2: Medium;** **1: Low**

COURSE CONTENT

Module 1: VALUES AND SELF-DEVELOPMENT **(09 Periods)**

Values and self-development –Social values and individual attitudes. Work ethics, Indian vision of humanism. Moral and non-moral valuation. Standards and principles. Value judgements- Case studies

Module 2: IMPORTANCE OF CULTIVATION OF VALUES. **(09 Periods)**

Importance of cultivation of values. Sense of duty. Devotion, Self-reliance. Confidence, Concentration. Truthfulness, Cleanliness. Honesty, Humanity. Power of faith, National Unity. Patriotism. Love for nature, Discipline- Case studies

Module 3: PERSONALITY AND BEHAVIOR DEVELOPMENT **(09 Periods)**

Personality and Behavior Development - Soul and Scientific attitude. Positive Thinking. Integrity and discipline, Punctuality, Love and Kindness - Case studies

Module 4: AVOID FAULTY THINKING. **(09 Periods)**

Avoid fault Thinking. Free from anger, Dignity of labour. Universal brotherhood and religious tolerance. True friendship. Happiness Vs suffering, love for truth. Aware of self-destructive habits. Association and Cooperation. Doing best for saving nature - Case studies

Module 5: CHARACTER AND COMPETENCE **(09 Periods)**

Character and Competence –Holy books vs Blind faith. Self-management and Good health. Science of reincarnation, Equality, Nonviolence, Humility, Role of Women. All religions and the same message. Mind your Mind, Self-control. Honesty, Studying effectively- Case studies

Total Periods: 45

EXPERIENTIAL LEARNING

1. Demonstrate orally using your experiences of what values are naturally acceptable in a relationship to nurture or exploit others.
2. Prepare a report by identifying and analyzing the importance of cultivation of values.
3. Present a poster on different attitudes and behaviours.
4. Students give a PowerPoint presentation on doing best for nature.
5. Students are encouraged to bring a daily newspaper to class or to access any news related to the need for human values and note down the points.
6. Prepare a case study on how to maintain harmony with different religious people through character and competence.

(It's an indicative one. The Course Instructor may change the activities and the same shall be reflected in the Course Handout)

RESOURCES

TEXTBOOKS:

1. R. Subramanaian, *Professional Ethics*, Oxford Higher Education, 2013.
2. Mike W. Martin and Roland Schinzinger, *Ethics in Engineering*, Tata McGraw-Hill, 3rd Edition, 2007.
3. Chakravarthy, S.K.: Values and ethics for Organizations: Theory and Practice, Oxford University Press, NewDelhi, 1999.

REFERENCE BOOKS:

1. M.G. Chitakra: Education and Human Values, A.P.H. Publishing Corporation, New Delhi, 2003
2. Awakening Indians to India, Chinmayananda Mission, 2003
3. Satchidananda, M.K.: Ethics, Education, Indian Unity and Culture, Ajantha Publications, Delhi, 1991

VIDEO LECTURES:

1. <https://www.youtube.com/watch?v=90VQPZURN5c>
2. <https://www.youtube.com/watch?v=6ofPcK0uDaA>
3. https://www.youtube.com/watch?v=5_f-7zCi79A
4. <https://www.youtube.com/watch?v=2ve49BWAJRE>
5. <https://www.youtube.com/watch?v=kCOIfnxxQ5U>

WEB RESOURCES:

1. <https://www.livingvalues.net/>
2. <https://livingvalues.net/materials-for-schools/>
3. <https://www.edb.gov.hk/en/curriculum-development/4-key-tasks/moral-civic/index.html>

UNIVERSITY ELECTIVE

Course Code	Course Title	L	T	P	S	C
25SS201702	PEDAGOGY STUDIES	3	-	-	-	3
Pre-Requisite	-					
Anti-Requisite	-					
Co-Requisite	-					

COURSE DESCRIPTION: This course deals with understanding pedagogical practices that are being used by teachers in formal and informal classrooms, the effectiveness of pedagogical practices, teacher education (curriculum and practicum), and the school curriculum and guidance materials that can best support effective pedagogy.

COURSE OUTCOMES: After successful completion of the course, students will be able to:

- CO1.** Demonstrate knowledge of pedagogical methodology
- CO2.** Analyze the functional knowledge in Pedagogical practices, Curriculum, and Teacher Education
- CO3.** Learn effective pedagogical practices and apply strategies.
- CO4.** Function effectively as an individual and as a member of the Professional development.
- CO5.** Understand research Gaps and provide future Directions.

CO-PO Mapping Table:

Course Outcomes	Program Outcomes						
	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	2	1	-	-	-	-	-
CO2	2	3	-	-	3	-	-
CO3	2	2	-	-	3	-	-
CO4	1	1	-	-	-	-	-
CO5	-	-	-	-	-	-	-
Course Correlation Mapping	2	2	-	-	3	-	-

Correlation Levels: **3: High; 2: Medium; 1: Low**

COURSE CONTENT

Module 1: INTRODUCTION AND METHODOLOGY

(09 Periods)

Aims and rationale, Policy background, Conceptual framework and terminology Theories of learning, Curriculum, Teacher education. Conceptual framework, Research questions. Overview of Methodology and Searching- Case studies

Module 2: THEMATIC OVERVIEW

(09 Periods)

Pedagogical practices are being used by teachers in formal and informal classrooms in developing countries. Curriculum, Teacher Education- Case studies

Module 3: EFFECTIVENESS OF PEDAGOGICAL PRACTICES

(09 Periods)

Evidence on the effectiveness of pedagogical practices, Methodology for the in-depth stage: quality Assessment of included studies, teacher education (curriculum and practicum) and the school curriculum and guidance materials best support effective pedagogy, Theory of change, Strength and nature of the body of evidence for effective pedagogical practices. Pedagogic theory and pedagogical approaches. Teachers' Attitudes and beliefs and Pedagogic strategies- Case studies

Module 4: PROFESSIONAL DEVELOPMENT

(09 Periods)

Alignment with classroom practices and follow-up support, Peer support, and Support from the head teacher and the community. Curriculum and assessment, Barriers to learning: limited resources and large class sizes- Case studies

Module 5: RESEARCH GAPS AND FUTURE DIRECTIONS

(09 Periods)

Research design, Contexts, Pedagogy, Teacher Education, Curriculum and Assessment, Dissemination and research impact- Case studies

Total Periods: 45

EXPERIENTIAL LEARNING

1. List out the self-improvement in you after going through pedagogical methodologies.
2. Discuss different practices that you would like to adopt in the curriculum.
3. Describe in your own words how can you bring effectiveness to the curriculum.
4. Imagine you are a head teacher and illustrate different barriers to learning.
5. Assume you are a teacher and Interpret different directions that you would bring for the assessment of the students.

(It's an indicative one. The Course Instructor may change the activities and the same shall be reflected in the Course Handout)

RESOURCES

TEXTBOOK:

1. Ackers J, Hardman F (2001) Classroom interaction in Kenyan primary schools, *Compare*, 31 (2): 245-261.
2. Alexander RJ (2001) Culture and pedagogy: International comparisons in primary education.

REFERENCES:

1. Akyeampong K (2003) Teacher training in Ghana - does it count? Multi-site teacher education
2. Agrawal M (2004) Curricular reform in schools: The importance of evaluation, *Journal of Curriculum Studies*, 36 (3): 361-379.Oxford and Boston: Blackwell.
3. Akyeampong K, Lussier K, Pryor J, Westbrook J (2013) Improving teaching and learning of basic maths and reading in Africa: Does teacher preparation count? *International Journal*
4. Chavan M (2003) Read India: A mass scale, rapid, 'learning to read' campaign.

VIDEO LECTURES:

1. <https://www.youtube.com/watch?v=WL40UeySag4>
2. <https://www.youtube.com/watch?v=MMXaXDIHFJ8>
3. <https://www.youtube.com/watch?v=7uJL1R6M4Iw>

WEB RESOURCES:

1. <https://acrl.ala.org/IS/instruction-tools-resources-2/pedagogy/a-selected-list-of-journals-on-teaching-learning/>
2. <https://guides.douglascollege.ca/TLonline/resourcesforonlinepedagogy>
3. https://www.refseek.com/directory/teacher_resources.html

UNIVERSITY ELECTIVE

Course Code	Course Title	L	T	P	S	C
25LG201701	PERSONALITY DEVELOPMENT THROUGH ESSENTIAL LIFE SKILLS	3	-	-	-	3
Pre-Requisite	-					
Anti-Requisite	-					
Co-Requisite	-					

COURSE DESCRIPTION: This course gives awareness to students about the various dynamics of personality development.

COURSE OUTCOMES: After successful completion of the course, students will be able to:

- CO1.** Demonstrate knowledge in Self-Management and Planning Career
- CO2.** Analyze the functional knowledge in attitudes and thinking strategies
- CO3.** Learn and apply soft skills for professional success.
- CO4.** Function effectively as an individual and as a member in diverse teams
- CO5.** Communicate effectively in public speaking in formal and informal situations.

CO-PO Mapping Table:

Course Outcomes	Program Outcomes						
	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	2	1	-	-	-	-	-
CO2	2	3	-	-	-	-	-
CO3	2	2	-	-	3	-	-
CO4	1	1	-	-	-	-	-
CO5	-	-	-	-	-	-	-
Course Correlation Mapping	2	2	3	-	3	-	-

Correlation Levels: **3: High;** **2: Medium;** **1: Low**

COURSE CONTENT

Module 1: SELF-ESTEEM & SELF-IMPROVEMENT	(09 Periods)
Concept of personality, significance of personality-Know Yourself – Accept Yourself; Self-Improvement: Plan to Improve - Actively Working to Improve Yourself- SWOT Analysis- Exercises- case studies	
Module 2: DEVELOPING POSITIVE ATTITUDES	(09 Periods)
How Attitudes Develop – Attitudes are Catching – Improve Your Attitudes – Exercises- case studies- Positive attitude and its advantages, negative attitude and its disadvantages-case studies	
Module 3: SELF-MOTIVATION & SELF-MANAGEMENT	(09 Periods)
Concept of motivation, significance, factors leading to de-motivation- Show Initiative – Be Responsible - Self-Management; Efficient Work Habits – Stress Management – Employers Want People Who can Think – Thinking Strategies- Exercises- case studies	
Module 4: GETTING ALONG WITH THE SUPERVISOR	(09 Periods)
Know your Supervisor – Communicating with your Supervisor – Special Communication with Supervisor – What Should you Expect of Your Supervisor? – What your Supervisor expects of you - Moving Ahead Getting Along with your Supervisor- Exercises- case studies	
Module 5: WORKPLACE SUCCESS	(09 Periods)
First Day on the Job – Keeping Your Job – Planning Your Career – Moving Ahead- Essential employability skills, professional attributes, and career development strategies -Exercises- case studies.	

Total Periods: 45

EXPERIENTIAL LEARNING

1. List out the self-improvements in you on the charts and explain in detail.
2. Discuss different famous personalities and their attitudes.
3. Describe different personalities concerning self-motivation and self-management.
4. Imagine you are a supervisor and illustrate different special communications.
5. Assume and Interpret different experiences on the first day of your job.

RESOURCES

TEXTBOOK:

- 1 Harold R. Wallace and L. Ann Masters, Personal Development for Life and Work, Cengage Learning, Delhi, 10th edition Indian Reprint, 2011. (6th Indian Reprint 2015)
- 2 Barun K. Mitra, Personality Development and Soft Skills, Oxford University Press, 2011.

REFERENCE BOOKS:

- 1 K. Alex, Soft Skills, S. Chand & Company Ltd, New Delhi, 2nd Revised Edition, 2011.
- 2 Stephen P. Robbins and Timothy A. Judge, Organizational Behaviour, Prentice Hall, Delhi, 16th edition, 2014

VIDEO LECTURES:

1. <https://www.youtube.com/watch?v=6Y5VWBLi1es>
2. <https://www.youtube.com/watch?v=H9qA3inVMrA>

WEB RESOURCES:

- 1 <https://www.universalclass.com/.../the-process-of-personality>
- 2 <https://www.ncbi.nlm.nih.gov/pubmed/25545842>
- 3 <https://www.youtube.com/watch?v=Tuw8hxrfBH8>

SCHOOL CORE

Course Code	Course Title	L	T	P	S	C
25MG201701	Entrepreneurship and Innovation Management	3	-	-	-	3
Pre-Requisite	-					
Anti-Requisite	-					
Co-Requisite	-					

COURSE DESCRIPTION: This course provides a comprehensive understanding of the principles and practices of entrepreneurship and innovation management. It is designed to equip students with the knowledge, skills, and mindset required to identify, evaluate, and exploit business opportunities in dynamic and competitive environments. The course covers the entrepreneurial process from opportunity recognition, creativity, and business idea generation to business planning, financial management, and venture scaling. By the end of the course, students will be able to integrate entrepreneurial thinking with innovative practices to develop sustainable business solutions and contribute to economic and social development.

COURSE OUTCOMES: After successful completion of the course, students will be able to:

- CO1.** Assess personal entrepreneurial traits and mindset.
- CO2.** Evaluate business ideas for commercial viability and sustainability.
- CO3.** Explain the role of innovation in creating competitive advantage.
- CO4.** Analyze financial requirements and identify funding sources.
- CO5.** Apply legal, ethical, and HR considerations in managing entrepreneurial ventures.

CO-PO Mapping Table:

Course Outcomes	Program Outcomes						
	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	2	2	-		1	-	1
CO2	2	2	-	1	-	1	1
CO3	1	1	1	-	-	-	1
CO4	1	1	-	1	-	1	-
CO5	-	-	1	2	2	1	-
Course Correlation Mapping	2	2	1	1	2	1	1

Correlation Levels: **3: High;** **2: Medium;** **1: Low**

COURSE CONTENT

Module 1: INTRODUCTION TO ENTREPRENEURSHIP (08 Periods)

Definition, characteristics, and types of entrepreneurs, Role of entrepreneurship in economic development, Entrepreneurial mindset and traits, Entrepreneurship in different contexts (start-ups, SMEs, corporate)

Module 2: OPPORTUNITY IDENTIFICATION AND BUSINESS IDEAS (08 Periods)

Sources of business ideas and opportunity recognition, Creativity and idea generation techniques, Market research and feasibility analysis, Problem-solving and opportunity evaluation

Module 3: INNOVATION MANAGEMENT (09 Periods)

Types of innovation (product, process, business model, service), Innovation process and strategies, Managing creativity and R&D, Open innovation and collaboration

Module 4: BUSINESS PLANNING AND FINANCIAL MANAGEMENT FOR STARTUPS (10 Periods)

Components of a business plan, financial planning, funding sources, and venture capital, Costing, budgeting, and break-even analysis, Risk management and mitigation strategies

Module 5: MANAGING AND SCALING NEW VENTURES (10 Periods)

Organizational structure for startups, Growth strategies and scaling challenges, Leadership, team building, and human resource management, Legal, regulatory, and ethical considerations in entrepreneurship

Total Periods:45

EXPERIENTIAL LEARNING LIST OF EXCERSIES:

LIST OF EXCERSIES:

1. Opportunity Recognition Exercise (SWOT, PESTEL)
2. Business Idea Generation Workshop (SCAMPER, Mind Mapping, Design Thinking)
3. Feasibility Study & Market Research Project
4. Business Model Canvas Development
5. Pitch Presentation (Elevator Pitch)
6. Innovation Case Study Analysis
7. Financial Planning Simulation
8. Prototype / Minimum Viable Product (MVP) Exercise
9. Team-Building and Leadership Activity
10. Entrepreneurship Reflection Journal

RESOURCES

TEXT BOOKS:

1. Drucker, P. F. (2014). Innovation and entrepreneurship. Routledge.
2. Hisrich, R. D., Peters, M. P., & Shepherd, D. A. (2017). Entrepreneurship (10th ed.). McGraw-Hill Education.
3. Kuratko, D. F. (2017). Entrepreneurship: Theory, process, practice (10th ed.). Cengage Learning.

REFERENCE BOOKS:

1. Timmons, J. A., & Spinelli, S. (2019). New venture creation: Entrepreneurship for the 21st century (10th ed.). McGraw-Hill Education.
2. Osterwalder, A., & Pigneur, Y. (2010). Business model generation. Wiley.
3. Schilling, M. A. (2020). Strategic management of technological innovation (6th ed.). McGraw-Hill Education.
4. Barringer, B. R., & Ireland, R. D. (2016). Entrepreneurship: Successfully launching new ventures (5th ed.). Pearson.

VIDEO LECTURES:

1. <https://nptel.ac.in/courses/110/105/110105121>
2. https://www.youtube.com/playlist?list=PLUI4u3cNGP61O7HkcF7UImpM0cR_XgXhg

WEB RESOURCES:

1. <https://www.kauffman.org/>
2. <https://ocw.mit.edu/>
3. <https://hbr.org/>

SPECIALISATION ELECTIVE

Course Code	Course Title	L	T	P	S	C
25MG202008	BUSINESS INTELLIGENCE WITH POWER BI	2	-	2	-	3
Pre-Requisite	-					
Anti-Requisite	-					
Co-Requisite	-					

COURSE DESCRIPTION: This course aims to provide knowledge on one of the powerful business intelligence tool. The learner discovers quick ways to extract, transform and load data with interactive visualization techniques that result in retrieving valuable insights.

COURSE OUTCOMES: After successful completion of the course, students will be able to:

- CO1.** Understand the concept of business Intelligence.
- CO2.** Understand the architecture and usage of Microsoft PowerBI tool.
- CO3.** Transform the data with the help of various transformation techniques.
- CO4.** Model and build relationships among data.
- CO5.** Create report and dashboards.

CO-PO Mapping Table:

Course Outcomes	Program Outcomes						
	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	3	2	-	2	-	1	2
CO2	3	2	-	2	-	-	2
CO3	3	3	-	2	-	2	3
CO4	3	3	-	2	1	2	3
CO5	2	3	-	3	2	2	3
Course Correlation Mapping	3	3	-	2	2	2	3

Correlation Levels: **3: High; 2: Medium; 1: Low**

COURSE CONTENT

Module 1: BUSINESS INTELLIGENCE

(06 Periods)

Introduction, The impact of business intelligence, business Intelligence and data warehousing, Tools & Technologies.

Module 2: POWER BI

(06 Periods)

Power bi introduction, architecture, power bi with excel, Power BI desktop interface, Getting data into power bi: connect to excel, csv files, text files, web page. Entering data directly.

Module 3: DATA TRANSFORMATION

(06 Periods)

Introduction to power query, Row and column transformations, Data types, Number column calculations, Date time calculations, Built-in and custom functions.

Module 4: MODELING WITH POWER BI

(06 Periods)

Introduction, with and without modeling, building relationships, editing relationships, DAX, calculated columns and measures, DAX functions.

Module 5: REPORTS & DASHBOARDS

(06 Periods)

Visualization: Creating reports, filters and highlights in reports, types of visualization in powerBI reports.Dashboards: Creating dashboards, pin a title to dash board, Adding objects(image, video, textbox) to dashboards, Print a dashboard. Modeling with power bi

Total Periods:30

EXPERIENTIAL LEARNING

List of Exercises

1. Import data from excel and load in the target system.
2. Perform ETL process.
3. Perform data visualization from ETL process.
4. Apply what-if analysis for data visualization.
5. Create a DAX file.
6. Create a report in Power BI.
7. Create a dashboard using reports.

CASE STUDIES

1. Create student file to suggest better college using decision tree.

RESOURCES

TEXT BOOKS:

1. Collie, R., & Singh, A. (2021). Power BI cookbook: Creating business intelligence solutions of analytical data models, reports, and dashboards (2nd ed.). Packt Publishing.
2. Ferrari, A., & Russo, M. (2020). Introducing Microsoft Power BI. Microsoft Press.

REFERENCE BOOKS:

1. Chapple, M. (2021). Exam ref DA-100 analyzing data with Microsoft Power BI. Microsoft Press.
2. Murray, D. (2020). Collect, combine, and transform data using Power Query in Excel and Power BI (Business skills series). Microsoft Press.
3. Martinez, D., & García, J. (2021). Mastering Microsoft Power BI: Expert techniques for effective data analytics and business intelligence. Packt Publishing.

VIDEO LECTURES:

1. <https://nptel.ac.in/courses/110105089>
2. <https://www.youtube.com/watch?v=AGrl-H87pRU>

WEB RESOURCES:

1. <https://www.packtpub.com/product/power-bi-cookbook-second-edition/9781801814636>
2. <https://powerbi.microsoft.com/>