Detailed Curriculum for Undergraduate Degree
BBA
(w.e.f. AY: 2025-26)

Part VI: Detailed Curriculum

Course Name:	**Customer Relationship Management**		
Course Code:	BBA-MJ-MM-801	**Category:**	Management Science Course
Semester:	8th SEM	**Credit:**	4
L-T-P:	4-0-0	**Pre-Requisites:**	The basic concept of Marketing
Full Marks:	100		
Examination Scheme:	Semester Examination:70	Continuous Assessment:25	Attendance:05

Course Objectives:	
1	To provide students with a foundational understanding of Customer Relationship Management (CRM), its evolution, and its significance in modern business practices.
2	To equip students with the knowledge and skills to develop and implement effective CRM strategies across various stages of the customer lifecycle.
3	To familiarize students with the role of information technology in CRM, including the use of CRM software, data management, and analytics.
4	To prepare students to apply CRM principles in real-world business scenarios, focusing on industry-specific applications and ethical considerations.

Course Contents:

Module No.	Description of Topic	Contact Hrs.
1.	Introduction to Customer Relationship Management: Definition and evolution of CRM, CRM vs. Relationship Marketing, Key Components of CRM, CRM Strategies and Models, Benefits and challenges of implementing CRM, CRM Process Flow and Implementation Stages, CRM in the Digital Age, Successful CRM Implementations, Ethical Considerations in CRM Practices.	10L
2.	CRM Strategies and Customer Life Cycle: Customer Acquisition Strategies, Customer Retention Techniques, Customer Loyalty Programs, Customer Development and Value Maximization, Customer Life Cycle Management, Segmentation and Targeting in CRM, Personalization and Customization Strategies, Cross-Selling and Up-Selling Techniques, Measuring CRM Effectiveness.	10L
3.	Role of Information Technology in CRM: CRM Software and Tools Overview, e-CRM: Concepts and Applications, Data Management in	10L

	CRM, Customer Data Integration and Analysis, CRM and Social Media Integration, Mobile CRM Applications, Cloud-Based CRM Solutions, CRM Analytics and Reporting.	
4.	CRM Implementation Framework: Project Planning and Management in CRM, Training and Support in CRM Systems, CRM in Retail and E-Commerce, CRM in Banking and Financial Services, CRM in Hospitality and Tourism, CRM in Healthcare Services, CRM in Telecommunications, Challenges in CRM Implementation	10L
Total		**40L**

Course Outcomes:	
After completion of the course, students will be able to:	
1	Define CRM and differentiate it from relationship marketing, understanding its key components and models.
2	Analyze and design CRM strategies that enhance customer acquisition, retention, and loyalty throughout the customer lifecycle.
3	Evaluate and utilize CRM technologies, including e-CRM, data analytics, and mobile CRM applications, to optimize customer interactions.
4	Assess the challenges and ethical considerations in CRM implementation and propose solutions for effective CRM practices in various industries.

Learning Resources:	
1	Customer Relationship Management: Concepts and Technologies, Francis Buttle & Stan Maklan, Taylor & Francis
2	Customer Relationship Management: The Foundation of Contemporary Marketing Strategy, Roger J. Baran & Robert J. Galka, Routledge
3	CRM at the Speed of Light, Paul Greenberg, McGraw-Hill
4	The Art of CRM, Max Fatouretchi

Corresponding NPTEL/SWAYAM Courses:			
Sl. No.	**Course Name**	**Instructor Name**	**Host Institute**
1	Customer Relationship Management	Prof. Swagato Chatterjee	IIT, Kharagpur
	Course Link: https://nptel.ac.in/courses/110105145		

OR,

Course Name:	**Security Analysis and Portfolio Management**		
Course Code:	BBA-MJ-FM-801	**Category:**	Management Science Course
Semester:	8th SEM	**Credit:**	4

L-T-P:	4-0-0	**Pre-Requisites:**	The basic concept of Finance
Full Marks:	100		
Examination Scheme:	Semester Examination:70	Continuous Assessment:25	Attendance:05

Course Objectives:	
1	To understand the empirical and theoretical implications of the financial environment
2	To develop and improve analytic abilities and valuation techniques for optimal portfolio management
3	To apply the knowledge and skills in the decision-making process.

Course Contents:

Module No.	Description of Topic	Contact Hrs.
1.	Security Analysis & Risk and Return: Concept of Security- Fundamental and Technical Analysis- difference between Fundamental and Technical Analysis. Definition of Risk and Return- Different types of Risk- measurement of Risk and Return of single security of Security Beta.	6
2.	Valuation of Bonds: Valuation of Bond: YTM and its calculation- Duration of Bond- Concept of Immunization—Valuation of Shares.	8
3.	Valuation of Securities: Introduction- Important Features- Basis of Valuation. Time value of Money- Income Capitalization method- Dividend Capitalization method- Price Earnings Ratio- Other Methods.	6
4.	Portfolio Theory: Concept of Portfolio, measurement of Portfolio risk and return, Markowitz Portfolio theory- Sharp Single Index Model - Arbitrage pricing theory, and Multi-Factor Theory.	8
5.	CAPM Model: Idea and interpretation - SML and CML. Analysis and interpretation- Usefulness.	8
6.	Other Contemporary Theories: Efficient Market Theory / Hypothesis– (support and resistance- Charts and graph– line chart – Candlestick Chart – various patterns) – Dow Theory –Elliot Wave Theory.	4
Total		**40L**

Course Outcomes:	
After completion of the course, students will be able to:	
1	Analyze and evaluate financial markets, how securities are traded, mutual funds, investment companies, and investor behavior.
2	Construct optimal portfolios and illustrate the theory and empirical applications of asset pricing models.
3	Explain macro and industry analysis, equity valuation, financial statement, and technical analysis.

4	Analyze bond prices and yields and fixed-income portfolios.
5	Characterize the implications of the market efficiency evidence on active portfolio management.
6	Explain what options and futures are and their use as hedging instruments.

Learning Resources:	
1	Bhalla. B.K. Investment Management, S Chand Publication
2	Avadhani, V.A., Security Analysis and Portfolio Management, Himalaya Publishing
3	Nagarajan &Jayabal, Security analysis and portfolio management, New AgeInternational
4	Copeland, Weston & Shastri, Multinational financial analysis, Pearson

Alternative NPTEL/SWAYAM Courses:			
1.	Security Analysis and Portfolio Management	Prof. J. P. Singh	IIT Roorkee
	Course Link: https://onlinecourses.nptel.ac.in/noc21_mg99/preview		

OR,

Course Name:	**Compensation Management**		
Course Code:	BBA-MJ-HR-801	**Category:**	Management Science Course
Semester:	8th SEM	**Credit:**	4
L-T-P:	4-0-0	**Pre-Requisites:**	The basic concept of HRM
Full Marks:	100		
Examination Scheme:	Semester Examination:70	Continuous Assessment:25	Attendance:05

Course Objectives:	
1	Understand the fundamental concepts and theories of compensation.
2	Analyze various components of employee compensation and their strategic significance.
3	Develop the ability to design and administer effective compensation systems.
4	Familiarize students with legal and ethical aspects of compensation management.

Course Contents:		
Module No.	**Description of Topic**	**Contact Hrs.**

1	**Introduction to Compensation Management:** a. Concept and Meaning of Compensation b. Objectives and Importance of Compensation Management c. Theories of Compensation – Reinforcement, Equity, Expectancy, Agency, and Tournament Theories d. Strategic Compensation and its Role in HRM e. Components of Total Compensation – Fixed Pay, Variable Pay, and Benefits f. Compensation as a Tool for Motivation and Retention g. Factors Influencing Compensation Decisions – Internal & External h. Trends and Challenges in Compensation Management	8L
2	**Job Evaluation and Pay Structure Design:** a. Concept and Purpose of Job Evaluation b. Job Analysis and its Link to Compensation c. Methods of Job Evaluation – Ranking, Classification, Point Factor, and Factor Comparison d. Designing Pay Structures – Pay Grades, Pay Ranges, and Pay Bands e. Competency-based Pay and Skill-based Pay f. Internal Equity and Pay Compression Issues g. Market Rate Surveys and Benchmarking h. Role of Technology and Analytics in Pay Structuring	8L
3	**Wage and Salary Administration:** a. Concepts of Wage and Salary b. Principles and Policies of Wage Administration c. Components of Wages – Basic, DA, HRA, Incentives, Bonus, and Fringe Benefits d. Wage Theories and Determinants e. Executive and Managerial Compensation f. Pay for Performance – Concepts and Implementation g. Compensation for Blue-collar vs. White-collar Employees h. Pay Administration in Public vs. Private Sectors	8L
4	**Incentives, Rewards, and Benefits:** a. Concept and Types of Incentives – Individual, Group, and Organizational b. Designing Incentive Schemes c. Monetary and Non-monetary Rewards d. Employee Benefits and Services – Health, Insurance, Retirement, Work-life Balance e. Performance-linked Pay and Variable Compensation Plans f. Gain sharing and Profit-sharing Plans g. Recognition and Reward Systems h. Benefits Administration and Cost Implications	8L
5	**Legal Framework and Emerging Issues in Compensation:** a. Overview of Indian Compensation Legislations: i. Payment of Wages Act, 1936 ii. Minimum Wages Act, 1948 iii. Payment of Bonus Act, 1965	8L

	iv. Equal Remuneration Act, 1976 v. Payment of Gratuity Act, 1972 b. Taxation Aspects of Compensation c. Ethical Issues in Compensation d. Executive Compensation and Corporate Governance e. Future Trends – Digital Pay Systems, Gig Economy, and Pay for Sustainability.	
Total		**40L**

Course Outcomes:	
After completion of the course, students will be able to:	
1	Explain the fundamental concepts, objectives, and theories of compensation management and its strategic role in human resource practices.
2	Analyze job evaluation methods, pay structures, and wage administration techniques to ensure internal and external equity in compensation systems.
3	Design and apply effective incentive, reward, and benefits programs that enhance employee motivation and organizational performance.
4	Evaluate the legal, ethical, and emerging global issues in compensation management and formulate fair and compliant compensation strategies.

Learning Resources:	
1	D. K. Bhattacharyya — Compensation Management *(*Oxford University Press, India)
2	B. D. Singh — Compensation and Reward Management *(*Excel Books /Vikas Publishing, India)
3	P. Subba Rao — Personnel and Human Resource Management (Including Compensation Management) (Himalaya Publishing House)
4	K. Aswathappa — Human Resource Management: Text and Cases [McGraw-Hill Education (India)].
5	Rajesh Kumar — Compensation Management: Rewarding Performance in the Contemporary Organisation *(*Sage Publications India)

Corresponding NPTEL/SWAYAM Courses:			
Sl. No.	**Course Name**	**Instructor Name**	**Host Institute**
1	Compensation and Reward Management	Dr. Preeti Malhotra	GD Goenka University
	Course Link: https://onlinecourses.swayam2.ac.in/imb26_mg135/preview		

Course Name:	**Marketing Analytics**		
Course Code:	BBA-MJ-MM-802	**Category:**	Management Science Course
Semester:	8th SEM	**Credit:**	4
L-T-P:	4-0-0	**Pre-Requisites:**	The Basics of Marketing Management
Full Marks:	100		
Examination Scheme:	Semester Examination:70	Continuous Assessment:25	Attendance:05

Course Objectives:	
1	Identify and describe market data sources and apply simple and multiple linear regression in Excel to forecast sales.
2	Analyze and apply various pricing strategies, including estimating demand curves, price bundling, nonlinear pricing, price skimming, and revenue management.
3	Consumer Analytics: Calculation of customer lifetime value, using Monte Carlo Simulation to calculate customer value.
4	Apply retailing and advertising analytics: Market Basket Analysis, Lift, RFM Analysis, retail space/resource allocation, advertisements effectiveness and Pay Per Click (PPC).

Course Contents:

Module No.	**Description of Topic**	**Contact Hrs.**
1.	Introduction to Marketing Analytics: Introduction, Market data sources (Primary and Secondary) Using excel to summarize data. Forecasting: Simple Linear Regression, Multiple Linear Regression to forecast sales.	8L
2.	Pricing: Estimating Demand Curves, Price Bundling, Nonlinear Pricing, Price Skimming, Revenue Management.	8L
3.	Consumer Analytics: Calculation of customer lifetime value, using Monte Carlo Simulation to calculate customer value.	8L
4.	Retailing Analytics: Market Basket Analysis, Lift, RFM Analysis, Allocating Retail Space and Sales Resources.	8L
5.	Advertising Analytics: Measuring the effectiveness of advertisements, Pay Per Click Online Advertising.	8L
Total		**40L**

Course Outcomes:	
After completion of the course, students will be able to:	
1	Interpret various marketing analytics tools
2	Articulate analytical skills to improve efficiency of various components of marketing mix
3	Apply analytics to overcome challenges, and issues of marketing in a changing technological landscape.

4	Utilize analytics to boost marketing through online advertising

Learning Resources:	
1	Marketing Analytics: Data-Driven Techniques with Microsoft Excel by Wayne L Winston, Wiley India, Pvt. Ltd.
2	Marketing Engineering and Analytics by Gary Lilen, Arvind Rangaswamy, and Arnaud De Bruyn Decision Pro, Inc.
3	Marketing Analytics: Strategic Models and Metrics by Stephan Sorger, Create Space Publishing.
4	Farris: Marketing Metrics, Pearson.
5	Kotlar Philip and Armstrong Gary: Principles of Marketing, Pearson.

Corresponding NPTEL/SWAYAM Courses:			
Sl. No.	**Course Name**	**Instructor Name**	**Host Institute**
1	Marketing Analytics	Prof. Swagato Chatterjee	IIT, Kharagpur
	Course Link: https://nptel.ac.in/courses/110105142		

OR,

Course Name:	**Financial Analytics**		
Course Code:	BBA-MJ-FM-802	**Category:**	Management Science Course
Semester:	8th SEM	**Credit:**	4
L-T-P:	4-0-0	**Pre-Requisites:**	The basic concept of Managerial Finance
Full Marks:	100		
Examination Scheme:	Semester Examination:70	Continuous Assessment:25	Attendance:05

Course Objectives:	
1	Understand the wide variety of applications of financial analytics.
2	Understand the sources of data, methods of importing, and cleaning data
3	Implement basic financial analytics models using R and/or Python.

Course Contents: (Choose 10 experiments from the following)		
Module No.	**Description of Topic**	**Contact Hrs.**
1.	Financial Statement Analytics: Projecting financial statements based on growth assumptions for all components, Modelling Cash flow, performing sensitivity analysis, break-even modelling, testing for bankruptcy risks	10L

2.	Credit Risk Analytics: Developing a credit default risk model using logistic regression based on loan performance data from a financial institution; Adapting the Altman Z-score model for Indian corporate.	10L
3.	Financial Time Series Analytics: Data importing and cleaning, plotting multiple series, examining the nature of data, forecasting using MA, EWMA, ARMA, ARCH, and GARCH	10L
4.	Portfolio and Trading Analytics: Optimized investment portfolios using Markowitz's mean-variance model; evaluated performance through the Sharpe Ratio, Treynor Ratio, and Jensen's Alpha. Developed and back-tested quantitative trading strategies using technical indicators such as Moving Average (MA), Relative Strength Index (RSI), Rate of Change (ROC), and MACD. Simulated and optimized trading strategies for improved risk-adjusted returns.	10L
Total		**40L**

Course Outcomes:	
After completion of the course, students will be able to:	
1	Utilise R and/or Python to conduct rudimentary analytics on financial data
2	Build simplistic credit default risk models on lending data.
3	Build, test, and optimize simple trading strategies.

Learning Resources:	
1	Yan, Y., Python for Finance, Packt Publishing
2	Weiming, J. M., Mastering Python for Finance, Packt Publishing
3	Ang, C. S., Analysing Financial Data and Implementing Financial Models using R, Springer
4	Bennett, M. J., Hugen, D. L., Financial analytics with R, Cambridge University Press

Corresponding NPTEL/SWAYAM Courses:			
Sl. No.	**Course Name**	**Instructor Name**	**Host Institute**
1	Advanced Financial Analytics	Prof. Abhinava Tripathi	IIT, Kanpur
	Course Link: https://nptel.ac.in/courses/110104624		

OR,

Course Name:	**Human Resource Analytics**		
Course Code:	BBA-MJ-HR-802	**Category:**	Management Science Course
Semester:	8thSEM	**Credit:**	4
L-T-P:	4-0-0	**Pre-Requisites:**	The basic concept of HRM

Full Marks:	100		
Examination Scheme:	Semester Examination:70	Continuous Assessment:25	Attendance:05

Course Objectives:	
1	To develop a foundational understanding of HR Analytics, including its definition, purpose, usage, ethical considerations, and the evolving role of HR professionals in data-driven decision-making.
2	To enable students to apply basic concepts and tools of HR Information Systems (HRIS), data types, and statistical techniques for analyzing HR-related data from descriptive to predictive analytics.
3	To build analytical competencies in interpreting employee engagement, predicting turnover, and assessing performance through real-world HR cases and survey data.
4	To equip students with skills to design HR dashboards, understand HR metrics, integrate datasets, and use statistical software for informed and ethical human capital decision-making.

Course Contents:

Module No.	Description of Topic	Contact Hrs.
1	Understanding HR analytics: Definition, Understanding the need, Human capital data storage, Current state of HR analytics professional and academic training, HR analytics and HR people strategy, Becoming a persuasive HR function, Usage, ethics, and limitations.	5L
2	Basic concepts, module, and application of HR information systems and data. Analysis strategies: From descriptive reports to predictive analytics, statistical significance, data integrity, types of data, concept of independent-dependent variable, and when to use which test.	6L
3	Employee attitude surveys– engagement and workforce perceptions: What is employee engagement; How do we measure employee engagement; Interrogating the measures, Cases.	6L
4	Predicting employee turnover: Employee turnover and why it is such an important part of HR management information, Descriptive turnover analysis, and measuring turnover at individual or team level, Exploring differences in both individual and team-level turnover, Cases.	6L
5	Predicting employee performance: Method and measure to indicate performance, Cases. Recruitment and selection analytics: Reliability and validity of selection methods, Human bias in recruitment selection, Cases.	6L
6	HR Metrics: Defining metrics, Demographics, data sources and requirements, Types of data, tying data sets together, Difficulties in obtaining data, ethics of measurement and evaluation. Human capital analytics continuum.	6L

7	Concepts of HR Dashboards, Statistical software used for HR analytics.	5L
Total		**40L**

Course Outcomes:	
After completion of the course, students will be able to:	
1	Define the role and importance of analytics in managing human resource effectively.
2	Interpret the concept and relevance of HR metrics
3	Apply analytical techniques in human resource domain to successfully conduct various HR functions
4	Articulate HR dashboard and application of software in the HR domain.

Learning Resources:	
1	Dr. Martin Edwards, Kirsten Edwards: Predictive HR Analytics: Mastering the HR Metric, Kogan Page.
2	Ramesh Soundararajan and Kuldeep Singh: Winning on HR Analytics: Leveraging Data for Competitive Advantage, Sage.
3	Dipak Kumar Bhattacharyya: HR Analytics: Understanding Theories and Applications, Sage.
4	Jac FITZ-ENZ: The New HR Analytics: Predicting the Economic Value of Your Company's Human Capital Investments, Amacom.

Corresponding NPTEL/SWAYAM Courses:			
Sl. No.	**Course Name**	**Instructor Name**	**Host Institute**
1	Human Resource Analytics	Prof. Santosh Rangenkar, Prof. Abhishek Singh	IIT Roorke, XLRI Jamshedpur
	https://nptel.ac.in/courses/110107492		