

INSTITUTE OF SCIENCE, TECHNOLOGY & ADVANCED STUDIES (VISTAS)
(Deemed to be University Estd. u/s 3 of the UGC Act, 1956)
PALLAVARAM, THALAMBUR, PERIYAPALAYAM-CHENNAI
ACCREDITED BY NAAC WITH 'A++' GRADE

MBA FINTECH

Curriculum and Syllabus
Regulations 2024

(Based on Choice Based Credit System (CBCS))

Effective from the Academic Year 2025 -2026

Department of Management Studies

School of Management Studies

Vision and Mission of the Department

Vision

To be a Centre of Excellence in Management Studies and Commerce, imparting and developing Managerial leadership and entrepreneurial skills to students and provide managers for the global market.

Mission

1. To provide an accessible and inclusive learning environment for diverse group of students and other stakeholders to learn by synergizing education, research, innovation and outreach efforts.
2. To foster self-discipline, strong values, ethics and sense of duty among the students to make them good citizens, leaders, professionals and entrepreneurs.
3. To create the future business leaders through innovative and analytical ability, decision making capability and integration of technology in education.
4. To provide exposure to global business standards by design thinking, rational judgement and competencies necessary to manage global and multinational ventures.

Program Educational Objectives (PEOs)

- PEO1: To provide exceptional quality education that prepares the students to meet global standards and competitive environment.
- PEO2: To inculcate team spirit and develop leadership capabilities among students, empowering them to emerge as business leaders and contribute to organizational development.
- PEO3: To impart ethical and moral values so as to inculcate the significance of Environmental, Social and Governance practices among students to create better citizens and society.
- PEO4: To equip the students with technology proficiency, nurture entrepreneurial skills to think strategically by encouraging them to become professionals.
- PEO5: To motivate students to participate in community development initiatives and participate Industry research projects.

Program Outcomes (POs)

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:	Ability to develop value based leadership ability.
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.

Program Specific Outcomes (PSOs)

PSO1:	Develop advanced financial management concepts with cutting-edge technologies to support strategic decision making and foster innovation within the financial service sector
PSO2:	Adapt design, implement and access digital financial solutions and platforms by leveraging programming skills, data analytics and cloud-based technologies
PSO3:	Conduct in-depth knowledge of regulatory framework, risk management, cyber security and ethical practice to ensure sustainable and compliance fin-tech operations

List of Board of Studies (BOS) Members along with their designation/role

S.NO	NAME & ADDRESS	DESIGNATION
1.	**Dr. Jayasree Krishnan** Director School of Management Studies & Commerce VISTAS	Chairperson
2.	**Dr. R. Magesh** Professor and Head Department of Management Studies Anna University, Chennai	External Expert
3.	**Mr. Prince Lazarus** Member- Confederation of Indian Industry CII, Chennai	CII Faculty
4.	**Dr. J. Balasubramanian** Head, Business Analytics, Ashok Leyland, Chennai	Industry Expert
5.	**Ms. Anitharaj Johnes George** Senior Talent Acquisition Analyst SPI global, Pondicherry	Alumni
6.	**Dr. S. Preetha** School of Management Studies, VISTAS	Professor
7.	**Dr. G. Rajini** School of Management Studies, VISTAS	Professor
8.	**Dr. P. G. Thirumagal** School of Management Studies, VISTAS	Professor
9.	**Dr. G. Madhumita** School of Management Studies, VISTAS	Professor
10.	**Dr. S. Sudha** School of Management Studies, VISTAS	Professor

VELS INSTITUTE OF SCIENCE, TECHNOLOGY AND ADVANCED STUDIES (VISTAS), CHENNAI

CHOICE BASED CREDIT SYSTEM (CBCS)

MBA FINTECH – REGULATIONS 2024

(Applicable to all the candidates admitted from the academic year 2025-26 onwards)

1. DURATION OF THE PROGRAMME

1.1. Two years (Four semesters)

1.2. Each academic year shall be divided into two semesters. The odd semesters shall consist of theperiod from July to November of each year and the even semesters from January to May of each year.

1.3 There shall be not less than 90 working days for each semester.

2. ELIGIBILITY FOR ADMISSION

2.1. The details of Eligibility for Admission

Passed bachelor's degree of minimum 3 years duration.

Obtained at least 50% marks (45% marks in case of candidates belonging to reserved category) in thequalifying examination.

3. MEDIUM OF INSTRUCTION

The medium of instruction for all PG programme is English.

4. CREDIT REQUIRMENTS AND ELIGIBILITY FOR AWARD OF DEGREE

A Candidate shall be eligible for the award of Degree only if he/she has undergone the prescribed course of study in VISTAS for a period of not less than TWO academic years and passed the examinations ofall the prescribed courses of FOUR Semesters earning a minimum of 102 credits as per the distribution given in the course structure.

5. COURSE

Each course / subject is to be designed under lectures / tutorials / laboratory or field work / seminar / practical training / Assignments / Term paper or Report writing etc., to meet effective teaching and learning needs.

6. COURSE OF STUDY AND CREDITS

The Course Components and Credit Distribution shall consist of:

The total number of subjects of study shall be 31 out of which 15 shall be core subjects, 7 will be Electives, 7 practical, Internship in Third semester and Project Work in the Final Semester with a Viva-voce altogether.

Candidates shall take 9 subjects (6 Core Theory + 3 Practical) in the First semester, 10 subjects (7 Core Theory + 3 Practical) in the Second Semester, 9 subjects (7 Elective Theory + 2 Practical including Internship) in the Third Semester and 3 subjects (2 Core Theory + 1 Project work) in the Fourth Semester.

Internship: The students have to undergo an internship for thirty days in between the second and third semester. The maximum marks for Internship will be 100. The Internship will be evaluated through Viva voce Exam by the guide and an External expert.

Project: The students will do Project work for Four months in the Fourth Semester. The Maximum marks for Project Work will be 300. The project Work will be evaluated through Vivavoce Exam by the guide and an External expert. The components of Project Work will be 100 marks for Dissertation and 200 marks for Viva voce.

To offer Elective Subjects to the students, a Minimum enrolment in the Elective Subjects shall be TWENTY.

For each course, credit is assigned based on the following:

Contact hour per week		CREDITS
1 Lecture hour	-	1 Credit
1 Tutorial hour	-	1 Credit
2 Practical Hours	-	1 Credit

(Laboratory / Seminar / Project Work / etc.)

7. REQUIREMENTS FOR PROCEEDING TO SUBSEQUENT SEMESTER

7.1. **Eligibility:** Students shall be eligible to go to subsequent semester only if they earn sufficient attendance as prescribed therefore by the Board of Management from time to time.

7.2. **Attendance:** All Students must earn 75% and above of attendance to appear for the University Examination. (Theory/Practical)

7.3. **Condonation of shortage of attendance:** If a Student fails to earn the minimum attendance (Percentage stipulated), the HODs shall condone the shortage of attendance on medical grounds up to a maximum limit of 10% (i.e. between 65% and above and less than 75%) after paying the prescribed fee towards the condonation of shortage of attendance. Students with attendance of less than 65 and more than 50% shall be condoned by VC on the recommendation of HODs on genuine grounds, will be permitted to appear for the regular examination on payment of the prescribed condonation fee.

7.4. **Detained students for want of attendance:** Students who have earned less than 50% of attendance shall be permitted to proceed to the next semester and to complete the Program of study. Such Students shall have to repeat the semester, which they have missed by rejoining after completion of final semester of the course, by paying the fee for the break of study as prescribed by the University from time to time.

7.5. **Transfer of Students and Credits:** The strength of the credits system is that it permits inter-Institutional transfer of students. By providing mobility, it enables individual students to develop their capabilities fully by permitting them to move from one Institution to another in accordance with their aptitude and abilities

7.5.1. Transfer of Students is permitted from one Institution to another Institution for the same program with same nomenclature, provided, there is a vacancy in the respective program of Study in the Institution where the transfer is requested.

7.5.2. The marks obtained in the courses will be converted into appropriate grades as per the University norms.

7.5.3. The transfer students are not eligible for Ranking, Prizes and Medals.

7.5.4. Students who want to go to foreign Universities for up to two semesters or Project Work with the prior approval of the Departmental / University Committee are allowed to transfer of their credits. Marks obtained in the courses will be converted into Grades as per the University norms and the students are eligible to get CGPA and Classification.

8. EXAMINATION AND EVALUATION

8.1. EXAMINATION:

i) There shall be examinations at the end of each semester, for odd semesters in the month of October / November, for even semesters in April / May. A candidate who does not pass the examination in any course(s) shall be permitted to appear in such failed courses in the subsequent examinations to be held in October / November or April / May.

ii) A candidate should register for the first semester examination. If registration is not possible owing to shortage of attendance beyond condonation limit / regulations prescribed OR belated joining OR on medical grounds, the candidates are permitted to move to the next semester. Such candidates shall re- do the missed semester after completion of the programme.

iii) The results of all the examinations will be published through the University Website. In thecase of passed out candidates, their arrear results, will be published through University Website.

8.2 **To Register for all subjects**: Students shall be permitted to proceed from the First Semester up to Final Semester irrespective of their failure in any of the Semester Examination, except for the shortage of attendance programs. For this purpose, Students shall register for all the arrear subjects of earlier semesters along with the current (subsequent) Semester Subjects.

8.3. Marks for Continuous Internal Assessment (CIA) Examinations and End Semester Examinations (ESE)

8.3.1 There shall be no passing minimum for Continuous Internal Assessment (CIA) Examinations.

8.3.2 For the End Semester examination, passing minimum shall be 50% (Fifty Percentage) of the Maximum marks prescribed for the Course/Practical/Project and Viva-Voce.

8.3.3 In the aggregate (CIA and ESE) the passing minimum shall be 50%.

8.3.4. He / She shall be declared to have passed the whole examination, if he/she passes in all the courses wherever prescribed in the curriculum by earning 102 CREDITS.

9. Question Paper Pattern for End Semester Examination

Duration: 3 Hours Max. Marks: 100

Part A	: 8 out of 10 questions	(8 X 5 = 40)
Part B	: 4 out of 6 questions	(4 X 10 = 40)
Part C	:1 Case Study or Problem is Compulsory	(1 X 20= 20)

Total Marks for each subject 100 Marks University

Exam 60 Marks

Internal Assessment 40 Marks

10. SUPPLEMENTARY EXAMINATION: Supplementary Examinations are conducted for the students who appeared in the final semester examinations. Eligible criteria for appearing in the Supplementary Examinations are as follows:

10.1. Eligibility: A Student who is having a maximum of two arrear papers is eligible to appear for the Supplementary Examination.

10.2. Non-eligibility for those who completed the program: Students who have completed their Program duration but having arrears are not eligible to appear for Supplementary Examinations.

11. RETOTALLING, REVALUATION AND PHOTOCOPY OF THE ANSWER SCRIPTS:

11.1. Re-totaling: All PG Students who appeared for their Semester Examinations are eligible for applyingfor re-totaling of their answer scripts.

11.2. Revaluation: All current batch Students who have appeared for their Semester Examinations are eligible for Revaluation of their answer scripts. Passed out candidates are not eligible for Revaluation.

11.3. Photocopy of the answer scripts: Students who have applied for revaluation can download their answer scripts from the University Website after fifteen days from the date of publication of the results.

12. The examination and evaluation for MOOCs will be as per the requirements of the regulatory bodies and will be specified at the beginning of the Semester and notified by the university NPTEL-SWAYAM Coordinator (SPOC).

13. CLASSIFICATION OF SUCCESSFUL STUDENTS

13.1. CORE SUBJECTS, PRACTICAL, ELECTIVES COURSES AND PROJECT: Successful Students passing the Examinations and securing the marks

a) CGPA 9.00 to 10.00 shall be declared to have passed the examination in **First class with Outstanding**.

b) CGPA 7.50 to 8.99 shall be declared to have passed the examination in **First class with distinction**.

c) CGPA 6.00 to 7.49 shall be declared to have passed the examination in **First Class**.

d) CGPA 5.00 to 5.99 in the aggregate shall be declared to have passed the examination in the **SECOND CLASS**.

14. MARKS AND GRADES: The following table shows the marks, grade points, letter grades and classification to indicate the performance of the student:

14.1. **Computation of Grade Point Average (GPA)** in a Semester, Cumulative Grade Point Average (CGPA) and Classification

GPA for a Semester: = ∑iCiGi ÷ ∑iCi That is, GPA is the sum of the multiplication of grade points by thecredits of the courses divided by the sum of the credits of the courses in a semester.

Where, Ci= Credits earned for course i in any semester,

Gi = Grade Points obtained for course i in any semestern = Semester in which such courses were credited.

CGPA for the entire programme: = ∑n∑iCniGni ÷∑n∑iCni That is, CGPA is the sum of the multiplication of grade points by the credits of the entire programme divided by the sum of the credits of the courses of the entire programme

Grade Conversion Table - PG			
90 - 100	10	O	Outstanding
85 - 89	9	A+	Excellent
80 - 84	8	A	Very Good
75 - 79	7.5	B+	Good
70 - 74	7	B	Above Average
60 - 69	6	C	Average
50 - 59	5	D	Minimum for pass
0 - 49	0	RA	Reappear
		AAA	Absent

Overall Performance - PG		
CGPA	**GRADE**	**CLASS**
5.00 - 5.99	D	Second Class
6.00 - 6.99	C	First Class
7.00 - 7.49	B	
7.50 – 7.99	B+	First Class with Distinction*
8.00 - 8.49	A	
8.50 – 8.99	A+	
9.00 - 10.00	O	First Class - Outstanding*

14.2. Letter Grade and Class CGPA

The students who have passed in the first appearance and within the prescribed semester of the PG Programme (Major and Elective courses only) are eligible.

15. RANKING

- Students who pass all the examinations prescribed for the Program in the FIRST APPEARANCE ITSELF ALONE are eligible for Ranking / Distinction.
- In the case of Students who pass all the examinations prescribed for the Program with a break inthe First Appearance are only eligible for Classification.
- Students qualifying during the extended period shall not be eligible for RANKING.

16. MAXIMUM PERIOD FOR COMPLETION OF THE PROGRAMS TO QUALIFY FOR ADEGREE

16.1. A Student who for whatever reasons is not able to complete the programs within the normal period

(N) or the Minimum duration prescribed for the programme, may be allowed two years period beyond the normal period to clear the backlog to be qualified for the degree. (Time Span = N + 2 years for the completion of programme)

16.2. In exceptional cases like major accidents and childbirth an extension of one year considered beyond maximum span of time (Time Span= N + 2 + 1 years for the completion of programme).

17. REVISION OF REGULATIONS, CURRICULUM AND SYLLABI

The University may from time-to-time revise, amend or change the Regulations, Curriculum, Syllabus and Scheme of examinations through the Academic Council with the approval of the Board of Management.

Overall credit distribution / Course Components with credits

S.No	Semester	Total number of Subjects	Core / Elective / Lab / Internship / Project Work	Credit Distribution		Total Credits	Total Credits for the Semester
				Credits	No. of Subjects		
1	I	9	6 Core Theory	4	6	24	**27**
			1 Practical	1	1	1	
			1 Practical	1	1	1	
			1 Practical	1	1	1	
2	II	10	7 Core Theory	4	7	28	**32**
			1 Practical	2	1	2	
			1 Practical	1	1	1	
			1 Practical	1	1	1	
3	III	9	7 Elective Theory	3	7	21	**26**
			1 Practical	1	1	1	
			1 Internship	4	1	4	
4	IV	3	1 Core Theory	4	1	4	**17**
			1 Core Theory	3	1	3	
			1 Project	10	1	10	
						Total	**102**

MBA FINTECH

REGULATIONS 2024

SEMESTER I

Code	Course	Hour / Week			C	Maximum Marks		
		L	T	P		CA	SEE	Total
25CMBF11	Managerial Economics	4	0	0	4	40	60	100
25CMBF12	Data Driven Decision Making	3	1	0	4	40	60	100
25CMBF13	Financial Reporting, Statements and Analysis	3	1	0	4	40	60	100
25CMBF14	Legal Aspects of Business	4	0	0	4	40	60	100
25CMBF15	Digital Payment and Innovation	4	0	0	4	40	60	100
25CMBF16	Digital Disruption and Finance	4	0	0	4	40	60	100
25PMBF11	Practical - Professional Upskilling I	0	0	2	1	40	60	100
25PMBF12	Practical - Advanced Excel and Financial Modelling	0	0	2	1	40	60	100
25PMBF13	Practical – MOOC 1	0	0	2	1	40	60	100
		22	**2**	**6**	**27**			

SEMESTER II

Code	Course	Hour / Week			C	Maximum Marks		
		L	T	P		CA	SEE	Total
25CMBF21	Business Research Methods	4	0	0	4	40	60	100
25CMBF22	Marketing Management	4	0	0	4	40	60	100
25CMBF23	Introduction to BFSI & Fintech	4	0	0	4	40	60	100
25CMBF24	Financial Management	3	1	0	4	40	60	100
25CMBF25	AI and ML in Finance	4	0	0	4	40	60	100
25CMBF26	Block Chain and Digital Currency	4	0	0	4	40	60	100
25CMBF27	Human Resources Management	4	0	0	4	40	60	100
25PMBF21	Data Visualization using BI Tools	0	0	4	2	40	60	100
25PMBF22	Practical - MOOC II	0	0	2	1	40	60	100
25PMBF23	Practical-Professional Upskilling II	0	0	2	1	40	60	100
		27	**1**	**8**	**32**			

SEMESTER III

Code	Course	Hour / Week			C	Maximum Marks		
		L	T	P		CA	SEE	Total
25EMBF..	Elective I	3	0	0	3	40	60	100
25EMBF..	Elective II	3	0	0	3	40	60	100
25EMBF..	Elective III	3	0	0	3	40	60	100
25EMBF..	Elective IV	3	0	0	3	40	60	100
25EMBF..	Elective V	3	0	0	3	40	60	100
25EMBF..	Elective VI	3	0	0	3	40	60	100
25EMBF..	Elective VII	3	0	0	3	40	60	100
25PMBF31	Practical - Data Analysis for Business Decisions	0	0	2	1	40	60	100
25IMBF31	Internship	0	0	8	4	40	60	100
		21	**0**	**10**	**26**			

SEMESTER IV

Code	Course	Hour / Week			C	Maximum Marks		
		L	T	P		CA	SEE	Total
25CMBF41	Entrepreneurship in Fintech	4	0	0	4	40	60	100
25CMBF42	Corporate Sustainability	3	0	0	3	40	60	100
25RMBF41	Project	0	0	20	10	100	200	300
		7	**0**	**20**	**17**			

TOTAL CREDITS: 102

ELECTIVE COURSES

FUNCTIONAL AREA	ELECTIVE COURSES	L	T	P	C
Fin Tech	Financial Analytics	3	0	0	3
	Data Visualization Techniques and Reporting	3	0	0	3
	Digital Development in Financial Technology	3	0	0	3
	Cyber Security in Fintech	3	0	0	3
	Investment Analysis and Portfolio Management	3	0	0	3
	Fintech Regulation & Ethics	3	0	0	3
	Fintech Product Development	3	0	0	3
	Financial Derivatives	3	0	0	3
	Financial And Risk Analytics	3	0	0	3
	Startup And Innovation Management	3	0	0	3
	Foreign Exchange Management	3	0	0	3
	Neo Banking Technology	3	0	0	3
	International Financial Management	3	0	0	3
	Fintech In Wealth Management	3	0	0	3
	Fraud Analytics, Risk and Regtech	3	0	0	3
	Fintech: Innovation And Transformation in Financial Services	3	0	0	3
	Financial Markets & Banking Operations	3	0	0	3

SEMESTER I

25CMBF11	MANAGERIAL ECONOMICS	4	0	0	4

Course Objectives

- To study the concept of Managerial Economics by applying a series of basic economics principles.
- To gain knowledge on issues related to optimal pricing strategies, demand forecasting, and optimal financing, appropriate hiring decisions, and investment decisions, among others, can be successfully tackled with managerial economics tools and to analyze how to incorporate a global perspective to their managerial economics box of tools.

UNIT I	INTRODUCTION	12 Hours

Introduction to Managerial Economics – Nature and scope of macroeconomics -Incremental principle – equi-marginal principle – some decision rules – The risk and uncertainty theory – optimization techniques – Baumol's sales maximization – least-cost combination.

UNIT II	DEMAND DECISIONS	12 Hours

Demand Decisions – Demand analysis – elasticity of demand – demand forecasting – types &methods of demand forecasting – trend projection method – least square method of demand forecasting limitations & uses

UNIT III	OUTPUT DECISIONS	12 Hours

Input-Output Decisions - Production function – Cost and managerial decision making – Cobb - Douglas production functions – Law of variable proportion – short run cost output – long run cost output – economies and dimensions of scale of production.

UNIT IV	PRICE-OUTPUT DECISIONS	12 Hours

Price-Output Decisions - Market Environment of Price Output Decisions by the Firm and the Industry – Pricing under perfect competition – oligopoly pricing strategies and tactics – pricing – pricing in life-cycle of a product -Profit-Maximization & Competitive Markets-Price-Searchers, Cartels, Oligopoly-Advanced Pricing and Auctions.

UNIT V	ECONOMIC THEORY	12 Hours

The Firm in Theory and Practice - Economic Theory of the Firm – The Behavioral Theory of the Firm - Managerial Theories of the Firm – Profit concepts & analysis – Game Theory and Asymmetric Information.

TOTAL : 60 Hours

Text Books:

1. H L Ahuja, Managerial Economics (Analysis of Managerial Decision Making), 2022, S Chand

2. Thomas J. Webster Pace University Professor Emeritus, Managerial Economics: Tools for Analyzing Business Strategy, 2017, Lexington Books

Reference Books:

1. K.K. Seo, Managerial Economics, Richard D. Irwin Inc.
2. C. Dhingra, Essentials of Managerial Economics - Theory, Applications and Cases Sultan Chand, New Delhi,

Web Links:

1. https://www.cheggindia.com/career-guidance/managerial-economics-principals-types-and- scope/
2. https://theinvestorsbook.com/managerial-economics.html
3. https://www.analyticssteps.com/blogs/what-managerial-economics-definition-types-nature- principles-scope

COURSE OUTCOMES

CO1:	Define the basic elements of managerial economics aspects of the firm.	**K1**
CO2:	Discuss the demand analysis decisions methods as to forecasting.	**K6**
CO3:	Apply the managerial decision functions of the firm.	**K3**
CO4:	Examine and elaborate the basic theories related to business practices.	**K4**
CO5:	Appraise on the decision as to environment and given	**K5**

MAPPING OF COURSE OUTCOMES TO PROGRAM OUTCOMES

	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**
CO1	**3**	**1**	**-**	**2**	**2**	**-**	**3**	**2**
CO2	**3**	**1**	**-**	**2**	**2**	**-**	**3**	**2**
CO3	**2**	**2**	**1**	**1**	**3**	**1**	**2**	**3**
CO4	**2**	**-**	**-**	**3**	**1**	**-**	**2**	**1**
CO5	**1**	**3**	**2**	**-**	**2**	**2**	**1**	**2**

25CMBF12	DATA DRIVEN DECISION MAKING	3	1	0	4

Course Objectives

- To acquaint the student with the applications of Statistics and Operations Research to business and industry.
- To help them to grasp the significance of analytical techniques in decision making.

UNIT I	INTRODUCTION TO STATISTICS	12 Hours
Introduction to Statistics - Collection of Data - Measures of Central Tendency & Dispersion in Frequency Distribution.		
UNIT II	**CORRELATION AND REGRESSION**	**12 Hours**
Correlation coefficient - Karl Pearson and Spearman Rank Correlation coefficient -Linear Regression equations.		
UNIT III	**HYPOTHESIS TESTING**	**12 Hours**
Hypothesis Testing –Test for Single Mean & Two Mean– Chi-Square test, F test ANOVA.		
UNIT IV	**INTRODUCTION TO OPERATIONS RESEARCH**	**12 Hours**
Operations Research – Linear programming (LP) – Formulation – Graphical Solution- Replacement Model- simple problems only – CPM and PERT models		
UNIT V	**TRANSPORTATION AND ASSIGNMENT**	**12 Hours**
Transportation Model – Initial Solution: Northwest Corner Rule, Least Cost Method, Vogel's Approximation method – Assignment Problem.		
TOTAL: 60 Hours		

Text Books:

1. D. Vohra, "Business Statistics", Tata McGraw-Hill Education, 2nd Edition, 2021.

2. Hamdy A. Taha, Operations Research-An introduction, Pearson Education, 10th Edition / Prentice Hall of India, 2019.

Reference Books:

1. S P Gupta," Business Statistics", 2023, VISIONIAS

2. N D Vohra , Hitesh Arora, Quantitative Techniques, 2021, **McGraw Hill**

Web Links:

1. https://machinelearningmastery.com/statistical-hypothesis-tests/
2. https://www.wiley.com/enin/Quantitative+Methods%3A+An+Introduction+for+Business+Management-p-9780470496343

COURSE OUTCOMES

CO1:	Explain and evaluate various measures of central tendency and measures of dispersion	**K5**
CO2:	Calculate correlation, regression and rank correlation	**K5**
CO3:	Construct hypotheses and test them by applying statistical tools.	**K6**
CO4:	Formulation of a Linear programming problem.	**K6**
CO5:	Evaluate the initial solution for the Transportation Model.	**K5**

MAPPING OF COURSE OUTCOMES TO PROGRAM OUTCOMES

	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**
CO1	**1**	**3**	**2**	**-**	**2**	**1**	**1**	**2**
CO2	**1**	**3**	**2**	**-**	**2**	**1**	**1**	**2**
CO3	**-**	**1**	**3**	**-**	**1**	**3**	**-**	**1**
CO4	**-**	**1**	**3**	**-**	**1**	**3**	**-**	**1**
CO5	**1**	**3**	**2**	**-**	**2**	**1**	**1**	**2**

25CMBF13	FINANCIAL REPORTING, STATEMENTS & ANALYSIS	3	1	0	4

Course Objectives

- To Interpret and analyze financial statements, including balance sheets, income statements, and cash flow statements.
- To evaluate the quality of financial reporting and disclosures.
- To apply financial reporting and analysis knowledge in real-world scenarios and decision-making.

UNIT I	INTRODUCTION	12 Hours

Introduction to Accounting, different types of businesses, Accounting Principles &Conventions, Ethics in Accounting, Process of Recording Business Transactions, the Accounting Equation, transaction analysis, Journalizing a transaction, trail balance, financial reporting framework of firms and companies.

UNIT II	ANALYSIS OF FINANCIAL STATEMENTS	12 Hours

Ratio Analysis: Liquidity, solvency, efficiency, and profitability ratios -Trend analysis and
industry comparisons Common Size Statement; Comparative Balance Sheet -and Trend Analysis of manufacturing, service & banking organizations.

UNIT III	FUNDS FLOW AND CASH FLOW ANALYSIS	12 Hours

Fund Flow Analysis: Meaning – uses – Preparation of Fund Flow Statement. Cash Flow Analysis -(as per Accounting Standard) -Meaning – uses – Preparation of Cash Flow Statement

UNIT IV	MARGINAL COSTING	12 Hours

Marginal Costing – Meaning – Definition - Assumptions and Uses - Marginal Costing Vs. Absorption Costing - BEP Analysis and Safety Margin -Managerial Decision-Making Areas.

UNIT V	BUDGETING AND FINANCIAL REPORTING	12 Hours

Budgeting – Different types of budgeting – Cash budget – Flexible budget. -Challenges in financial reporting -Ethical considerations in financial reporting-Integrated Reporting and Sustainability Reporting -Overview of integrated reporting framework -Importance of sustainability reporting -Linkage between financial performance and sustainability

TOTAL: 60 Hours

Text Books:

1 Financial Reporting, Financial Statement Analysis and Valuation: A Strategic Perspective" by James M. Wahlen, Stephen P. Baginski, and Mark T. Bradshaw 2 R.Narayanaswamy – 2021.

2. Financial accounting – A Managerial Perspective, Prentice Hall IndiaLtd., New Delhi 5th edition, 2014

Reference Books:

1. Financial Reporting and Analysis" (7th Edition, 2014) by Charles H. Gibson
2. Financial Reporting, Financial Statement Analysis and Valuation: A Strategic Perspective" (9th Edition, 2017) by James M. Wahlen, Stephen P. Baginski, and Mark T. Bradshaw

Web Links:

1. https://corporatefinanceinstitute.com/resources/knowledge/finance/analysis-of-financial- **statements/**
2. https://www.aafmindia.co.in/financial-statement-analysis-tools-limitation-uses-process
3. **https://www.accountingtools.com/articles/2017/5/14/financial-statement-analysis**

COURSE OUTCOMES

CO1:	Familiar with the use of financial software and technology tools for financial reporting and analysis	**K1**
CO2:	To understand the components of each statement, the interrelationships between them, and how to accurately compile financial data.	**K2**
CO3:	Prepare Financial statements through ratio analysis.	**K4**
CO4:	Interpret the results of their financial analysis and effectively communicate their findings to stakeholders, such as investors, managers, and creditors.	**K5**
CO5:	Develops the skills in analyzing financial statements to assess the financial health and performance of a company	**K3**

MAPPING OF COURSE OUTCOMES TO PROGRAM OUTCOMES

	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**
CO1	3	2	1	1	1	_	3	2
CO2	2	1	-	3	2	1	1	-
CO3	3	2	1	-	2	2	2	1
CO4	2	2	3	3	3	2	1	-
CO5	-	1	2	2	2	_	-	-

25CMBF14	LEGAL ASPECTS OF BUSINESS	4	0	0	4

Course Objectives

- The objective of this course is to familiarize the students with various laws that will help them to refine their understanding of how law affects the different aspects of business.
- To describe the nature and classes of contracts.
- To identify the elements needed to create a contract.
- To analyse and interpret the various act related to business, property and business.

UNIT I	INTRODUCTION	12 Hours

Basic principles of the Indian Constitution – Fundamental rights: Freedom of trade and commerce - Government contract. **Indian Contract Act, 1872:** Essentials of Contracts - Classification of Contract, Quasi contract, Performance of contract, Breach of contract and its Remedies, Discharge of contract.

UNIT II	SPECIAL CONTRACTS	12 Hours

Sales of Goods Act, 1930 -Sales, Agreement to sales & Hire Purchase, Rights of Unpaid Seller, Caveat Emptor, Condition & Warranties - Laws of Agency -Creation of agency, Types of agents, Rights and Duties of Principal and Agent, Termination agency- Bailment, Pledge, Guarantee and Indemnity. Negotiable Instruments Act 1881 **-** Partnership Act 1930

UNIT III	CONSUMER PROTECTION ACT 1986 & COMPETITION ACT 2002	12 Hours

Consumer protection Act 1986 -Competition Act 2002: Introduction, Definitions, Enquiry into Certain Agreements and Dominant Position of Enterprise and Combinations.

UNIT IV	COMPANY ACT 2013	12 Hours

Characteristics and types of companies, Formation, MOA, AOA, Prospectus, Power, duties and liabilities of Directors, Appointment of Board of directors, Winding up of Companies

UNIT V	IPR & IT ACT 2000	12 Hours

Protecting the property of Business-Copyright, Trademark, Secret, Geographical Indications-Cyber Crimes, IT Act 2000 and 2002, Cyber Laws, Introduction of IPR Intellectual Property Laws- Alternate Dispute resolutions.

TOTAL: 60 Hours

Text Books:

1. Rajdeep Banerjee, Joyeeta Banerjee, Legal Aspects of Business, Sage Publications, 1e,2022.

2. Francis Cherunilam, Business Environment Text & Cases, Himalaya Publications, 13e, 2022.

3. Ravinder Kumar, Legal Aspects of Business, Cengage Learning, 5e, 2021

Reference Books:

1. Francis Cherunilam, Business Environment Text & Cases, Himalaya Publications, 13e, 2022.

2. Akhileshwar Patha, Legal Aspects of Business, TMH, 7e, 2019.

3. MC Kuchhal, Vivek Kuchhal, Business Legislation for Management, Vikas, Publishing House,5e, 2018.

Web Links:

1. https://www.airtract.com/article/the-legal-environment-of-business-%E2%80%93-a- complete-guide#:~:text=Legal%20environment%20of%20business%20is,the%20scope%20of%20the%20firm.
2. https://www.indiastudychannel.com/resources/.6169-What-Legal-Environment.aspx

COURSE OUTCOMES

CO1:	Identify and define key legal and regulatory concepts relevant to business operations.	**K1**
CO2:	To Explain the purpose and rationale behind different legal and regulatory frameworks impacting businesses	**K2**
CO3:	Analyze real-world scenarios and identify the relevant legal and regulatory considerations for businesses engaged in international trade, mergers and acquisitions, fundraising activities, and stock market listings.	**K3**
CO4:	To analyze a hypothetical business scenario and identify relevant legal considerations based on the covered frameworks	**K3**
CO5:	To evaluate the effectiveness of specific legal and regulatory frameworks in achieving their intended goals	**K5**

MAPPING OF COURSE OUTCOMES TO PROGRAM OUTCOMES

	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3
CO1	**3**	**3**	**-**	**2**	**-**	**3**	**-**	**1**
CO2	**2**	**2**	**2**	**-**	**2**	**2**	**2**	**2**
CO3	**1**	**2**	**1**	**1**	**-**	**3**	**-**	**1**
CO4	**3**	**3**	**-**	**-**	**3**	**-**	**-**	**-**
CO5	**2**	**1**	**2**	**-**	**2**	**2**	**1**	**3**

25CMBF15	DIGITAL PAYMENT AND INNOVATION	4	0	0	4

Course Objectives

- Understand the evolution and current state of digital payment systems.
- Explore key technologies driving digital payments, including APIs, mobile payments, and block chain.
- Learn about emerging payment trends such as crypto currency, open banking, and real-time payments.
- Examine the regulatory and compliance requirements for digital payment systems in India and globally.
- Analyze successful digital payment systems and innovations through case studies.

UNIT I	INTRODUCTION TO DIGITAL PAYMENTS	12 Hours

Evolution of Digital Payments – Overview of traditional payment systems and the transition to digital – Key milestones in digital payments – Digital payment ecosystems: Banks, fintech's, and regulators – Key Technologies – APIs in digital payments – Mobile wallets, contactless payments, QR code technologies – Role of cloud computing and AI. Case Studies: India – UPI transition, Phone Pe, Google Pay; International – PayPal, Apple Pay.

UNIT II	INNOVATIONS IN DIGITAL PAYMENTS	12 Hours

Block chain and Crypto currencies – Fundamentals and applications in payments – Crypto currency systems: Bit coin, stable coins, CBDCs – Impact of DeFi – Real-Time Payments – Global adoption – IMPS and UPI in India – Open banking and APIs.Case Studies: India – RBI's CBDC pilot, UPI success; International – Bit coin in El Salvador, UK's PSD2 open banking.

UNIT III	SECURITY, RISK MANAGEMENT, AND COMPLIANCE	12 Hours

Digital Payment Security – Payment fraud, cyber security risks, encryption, tokenization, authentication – Operational risk management – Regulatory Compliance – India's PSS Act, GDPR, PSD2 – Wallets, gateways, aggregators compliance – Block chain and crypto regulations - Case Studies: India – Paytm tokenization, RBI wallet guidelines; International – Visa/Master card security, PSD2 compliance.

UNIT IV	CUSTOMER EXPERIENCE AND INNOVATION IN DIGITAL PAYMENTS	12 Hours

Customer Experience – Designing intuitive payment flows – Secure, transparent systems – AI/ML for personalized experiences – Product Development – Ideation to execution – Data-driven innovation – Trends: Chat bots, voice, IoT payments. Case Studies: India – CRED, Bharat Pe; International – Venmo, Square

UNIT V	FUTURE TRENDS AND GLOBAL EXPANSION OF DIGITAL PAYMENTS	12 Hours

Cross-Border Payments – Challenges, opportunities – Global remittance trends – Cross- border regulatory aspects – Future of Digital Payments – Role of 5G, IoT, edge computing – DeFi systems – Fin tech's bridging role. Case Studies: India – Insta mojo, NPCI UPI 2.0; International – Transfer Wise (Wise), Facebook Diem.

TOTAL: 60 Hours

Text Books

T1: Bradford, T. (2022). The Future of Payments: Innovation and Technology in the Financial Sector. FinTech Publishing.

T2: Casey, M. J., & Vigna, P. (2018). The Truth Machine: The Blockchain and the Future of Everything. St. Martin's Press.

Reference Books

R1: Kaka, N., Madgavkar, A., & Bughin, J. (2020). Digital Finance for All: Powering Inclusive Growth in Emerging Economies. McKinsey Global Institute.

R2: Tapscott, D., & Tapscott, A. (2016). Blockchain Revolution: How the Technology Behind Bitcoin is Changing Money, Business, and the World. Penguin.

Web Links

1. https://www.npci.org.in/what-we-do/upi/product-overview
2. https://www.rbi.org.in/Scripts/BS_PressReleaseDisplay.aspx?prid=54006
3. https://www.ecb.europa.eu/paym/html/index.en.html

COURSE OUTCOMES

CO1	Explain the key components of the digital payment ecosystem.	K2
CO2	Apply knowledge of emerging technologies like blockchain and cryptocurrencies to payment systems.	K3
CO3	Ensure compliance with domestic and international payment regulations.	K4
CO4	Evaluate security risks and implement risk management strategies in digital payments.	K5
CO5	Analyse case studies of innovative digital payment systems and identify key success factors.	K6

MAPPING OF COURSE OUTCOMES TO PROGRAM OUTCOMES

	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3
CO1	2					2		
CO2		2	2			1	2	
CO3			3	2		2		
CO4				3	2	2		
CO5	1		2		1		1	

25CMBF16	DIGITAL DISRUPTION AND FINANCE	4	0	0	4

Course Objectives

- To study the digitization of financial markets, insurance and banking.
- To understand the role of technology in investment analysis and planning.

UNIT I	THE LANDSCAP OF BANKING, FINANCIAL SERVICES, INSURANCE	12 Hours

Introduction to types of Banking in India – Focus on Retail banking & Investment Banking – Introduction to Mutual Funds and Insurance.

UNIT II	DIGITIZATION IN BANKING	12 Hours

Digital Banking trends globally – Digitization in Indian banks – Way forward for Indian digital banking ecosystem

UNIT III	DIGITIZATION IN FINANCIAL SERVICES	12 Hours

Digital delivery channels – Digitization's impact on payments, credit, savings, remittances and insurance.

UNIT IV	DIGITIZATION IN INSURANCE	12 Hours

Global trends and technological disruption – Impact of global insurance digitization in Indian markets

UNIT V	TECHNOLOGY IN INVESTMENT ANALYSIS & ADVISORY	12 Hours

Fundamental & Technical analysis – Use of technology in trend and company analysis – Financial planning & accounting technology – Big data, AI in investment advisory.

TOTAL: 60 Hours

Text Books

T1: Nascimento, A. & Rosario, N. (2020). Digital Finance: Security Tokens and Unlocking the Real Potential of Blockchain.
T2: Gupta, P. (2020). Fintech: The New DNA of Financial Services.

Reference Books

R1: Chishti, S., & Barberis, J. (2018). The FinTech Book: The Financial Technology Handbook for Investors, Entrepreneurs, and Visionaries. Wiley.

Web Links

1. https://www.rbi.org.in
2. https://www.npci.org.in
3. https://www.finextra.com

COURSE OUTCOMES

CO1	Understand the digital transformation in Indian and global financial markets.	K2
CO2	Analyze the role of technology in the banking, insurance and financial services sector.	K4
CO3	Evaluate digital innovations in investment analysis and advisory services.	K5
CO4	Understand Global trends and Global insurance	K2
CO5	Analyzing technology and Investment	K4

MAPPING OF COURSE OUTCOMES TO PROGRAM OUTCOMES

CO \ PO / PSO	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3
CO1	2					2		
CO2		2	2			1	2	
CO3			3	2	2	2		
CO4	2	2		2		2		
CO5	2	2	3	2				

25PMBF11	PRACTICAL – PROFESSIONAL UPSKILLING I	0	0	2	1

Course Objectives

- To improve the leadership quality, Effective Communication Skills, team management, quantitative analyzing knowledge, ordering, sequencing and logical thinking knowledge to meet their professional career.
- To improve the communication by understanding the elements of communication, presentation skills, understanding the audience, Personality factors, improve the skill in seminars and conferences presentation.

UNIT I	EFFECTIVE COMMUNICATION SKILLS	6 Hours

Importance of the language – Word Usage and Jargon's – Tenses and the effectiveness – Basics of grammar (Noun/Verb/Adverb/Conjunction) – Business English vs. Colloquial - Pronunciation and its importance – Verbal Communication - Non-verbal communication — Mannerisms and Empathy — What's stopping you from communicating effectively

UNIT II	PRESENTATION SKILLS AND LISTENING SKILLS	6 Hours

Meaning—Importance of Presentation—Concept of 5 w's and one H —understanding the audience—Types of presentations—How to make effective presentations - Use of slides, PPT's. and visuals—Rules for slide presentation—precautions-seminars and conferences-Steps to eliminate Stage fear. Engaged Listening - Grooming & Work Ethics - Assumptions/Perceptions vs. Reality - Reflection on your experience & improvement - Team Bonding/Building activities – Listening Skills - Attitude & Behaviour

UNIT III	LEADERSHIP SKILLS AND PERSONALITY DEVELOPMENT	6 Hours

Telephone etiquette - Giving clear and concise information - Listening Skills with Assessments - Intonations & its Importance - Mock sessions (Telephonic) – WHY-WHY Analysis and its importance. SWOT Analysis - Time Management – Sympathy vs. Empathy - Conflict resolution and negotiation - Self-awareness - Self-regulation - Procrastination and how to overcome it

UNIT IV	ADAPTABILITY AND PROBLEM SOLVING	6 Hours

Scenario based situation Handling - Embracing change - Critical thinking and analytical skills - Creativity and innovation - Building a professional network - Integrity and honesty - Professional development and continuous learning

UNIT V	QUANTITATIVE APRITUDE	6 Hours

Percentage – Profit Loss -Discount – Ratio Proportion – Time & Work – Time, Speed & Distance. Problems relating to ages- Permutation & Combination-Probability - Mensuration Clocks and Calendars- Boats-Simple Interest –Compound Interest- Fractions and Decimals – Square roots – Functions. Logical and Reasoning questions for interview.

TOTAL : 30 Hours

Text Books:

1. Managing Soft Skills And Personality - B N Ghosh, Mcgraw Hill Publications, 2017.

2. Personality Development And Soft Skills by Barun Mitra, Second edition, Oxford Publication, 2016.

3. Time management by Sudhir Dixit, Manjul Publishing House 2018.

Reference Books:

1. The Power of Creation by Ashish Manjeshwar, Scripto Book Publishers 2023.

2. Principles and Practices of Management by Neeru Vasishth, Vibhuti Vasisht, Taxmann publication,First Edition 2022.

Web Links:

1. https://www.mindtools.com/arb6j5a/what-is-time-management
2. https://usic.sheffield.ac.uk/blog/how-to-improve-your-presentation-skills

COURSE OUTCOMES

CO1:	Develop business communications with suitable grammatical terms.	**K6**
CO2:	Improve the presentation skills	**K6**
CO3:	Develop Leadership Skills and personality development	**K6**
CO4:	Maximize the problem-solving ability	**K6**
CO5:	Evaluate and develop aptitude level of the students	**K5**

MAPPING OF COURSE OUTCOMES TO PROGRAM OUTCOMES

	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3
CO1	-	2	3	-	1	3	-	1
CO2	-	2	3	-	1	3	-	1
CO3	-	2	3	-	1	3	-	1
CO4	-	2	3	-	1	3	-	1
CO5	1	3	2	-	2	2	1	2

25PMBF12	PRACTICAL - ADVANCED EXCEL AND FINANCIAL MODELLING	0	0	2	1

Course Objectives

- This course will cover all aspects of creating spreadsheet, performing calculations, formatting, some very widely used formulas.
- It will enable the students to create, build models and customize graphs, develop advanced solutions on the worksheet in the areas of marketing, finance, statistics, production and human resource and to assemble the proper Excel tools.

UNIT I	INTRODUCTION	6 Hours

Module: Introduction to Spreadsheet Modeling–Formulas/Formatting/Printing/Functions Cell references, Lookup tables, linking disparate workbooks, Dynamic linking, updating links, data validation, Goal seek,Pivot table, Sorting, Charting, and filtering and protecting spreadsheets.

UNIT II	SPREADSHEET MODELLING IN SALES AND MARKETING	6 Hours

New product decision making – Sales and marketing data analysis.

UNIT III	SPREADSHEET MODELLING IN FINANCE	6 Hours

Forecasting financial statements – Capital budgeting decisions, Bond valuation, Stock valuation, break even analysis, Budgeting, Ratio analysis, Sensitivity analysis, Simulation analysis, Portfolio construction and Working capital.

UNIT IV	SPREADSHEET MODELLING IN STATISTICS	6 Hours

Measures of central tendency, t test, ANOVA, Correlation, Regression and Timeseries analysis.

UNIT V	SPREADSHEET MODELLING IN PRODUCTION AND HUMAN RESOURCE	6 Hours

ABC analysis, Economic order quantity, Production budget– Employee and payroll decision making for European and American options, including Black-Scholes option formula and binomial trees.

TOTAL: 30 Hours

Text Books:

1. Walkenbach ,John. Excel Bible. NewDelhi: Wiley India Pvt Ltd. 2nd edition, 2010
2. MacDonald, Mathew.. Excel: The Missing Manual. Sebastopol : O'reilly. 2ndedition, 2010

Reference Books:

1. Ragsdale, Cliff. T, Spreadsheet Modelling and Decision Analysis. New York: Thomson south – western publications. .6thedition, 2008
2. Monahan, George E. ManagementDecision Making: Spreadsheet, Modelling, Analysis. London: CambridgeUniversity.8thedition,2000

Web links:

Microsoft Excel Official Training

- https://support.microsoft.com/en-us/excel
- Free beginner to advanced tutorials by Microsoft, including videos and templates.

Excel Exposure

- https://excelexposure.com
- Offers free lessons on formulas, pivot tables, VBA, and more. Also includes practice exercises. **Excel Easy (Advanced Section)**
- https://www.excel-easy.com
- Covers everything from basics to advanced topics like arrays, financial functions, and data analysis.

ExcelJet

- https://exceljet.net

COURSE OUTCOMES

CO1:	Understand the basic features of Excel spreadsheet functions.	**K2**
CO2:	Analyze and provide optimal solutions for the financial problems	**K4**
CO3:	Understand the pricing tools	**K2**
CO4:	Use the advanced tools of Excel	**K3**
CO5:	Record and build Excel Macros for implementing advanced functionalities	**K6**

MAPPING OF COURSE OUTCOMES TO PROGRAM OUTCOMES

	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3
CO1	**3**	**2**	**-**	**-**	**-**	**1**	**2**	**0**
CO2	**2**	**2**	**3**	**-**	**2**	**1**	**2**	**2**
CO3	**2**	**2**	**2**	**-**	**0**	**3**	**2**	**0**
CO4	**2**	**3**	**3**	**-**	**3**	**3**	**3**	**2**
CO5	**2**	**3**	**3**	**-**	**3**	**1**	**3**	**3**

25PMBF13	PRACTICAL – MOOC I	0	0	2	1

Course Objectives

- The objective of this course is to take the best teaching learning resources to all
- to create a levelled platform. To make use of the Indian massive online to theaspiring youth of India

The students will select a MOOC course from the Swayam platform.

They will spend 2 hours per week undergoing this practical MOOC courseunder the guidance of a faculty.

Every course will have a minimum of 8to a maximumof 12 assignments depending on the duration of the course.

Assignments will be submitted as per the requirements of the course.

The marks scored in the assignments will be taken for internal assessment marks.

The students will appear for a final practical exam conducted by VISTAS

TOTAL: 30 hours

COURSE OUTCOMES

CO1:	Understand the latest developments in the field of study.	**K2**
CO2:	Explain the students with latest information about the field of study	**K2**
CO3:	Apply the skills in the business world	**K3**
CO4:	List the various skills gained through this course	**K4**
CO5:	Summarize the concepts for application	**K2**

MAPPING OF COURSE OUTCOMES TO PROGRAM OUTCOMES

	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3
CO1	-	2	-	2	-	1	-	-
CO2	-	1	-	1	-	-	1	-
CO3	1	1	1	1	-	-	-	-
CO4	-	2	-	1	-	-	-	-
CO5	1	2	-	-	-	-	-	1

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SEMESTER II

25CMBF21	BUSINESS RESEARCH METHODS	4	0	0	4

Course Objectives

- The aim of the course is to introduce and establish a fundamental understanding of research methods in management practice and academia.
- This course explores qualitative and quantitative methodologies, highlighting their applications, strengths, and criticisms. It enables understanding of the decision-making process and steps in research.

UNIT I	Introduction to Business Research	12 Hours

The Nature of Business and Management Research, Research Foundations and Fundamentals, The Research Process and Proposal, Research in Business, Applying Scientific Thinking to Management Problems, The Research Process, The Research Proposal, Ethics in Business Research.

UNIT II	The Design of Business Research	12 Hours

Research Design, An Overview - Design Strategies, Quantitative and Qualitative Research, Sampling Design. Sampling Strategies, Primary Data Collection with Surveys, Primary Data Collection: Qualitative Data, Secondary Data and Archival Sources.

UNIT III	Research Instruments	12 Hours

Measurement and Scales, Measurement Foundations, Measurement Questions, Sources of Measurement Questions, Measurement Instruments, Validity and reliability of measurement scale construction and attitude measurement; Scales and techniques commonly used in management research.

UNIT IV	The Sources and Collection of Data	12 Hours

Exploring Secondary Data, Survey Methods: Communicating with Participant, Instruments for Participant Communication, Observational Studies, Experimentation

UNIT V	Analysis and Presentation of Data	12 Hours

Data Preparation and Description, Exploring, Displaying, and Examining Data, Hypothesis Testing, Measures of Association, Multivariate Analysis: An Overview, Presenting Results: Written and Oral Reports - Applications of AI in Research

TOTAL: 60 Hours

Text Books:

1. Donald R. Cooper, Pamela S. Schindler: Business Research Methods, 11/e, TMH, 2017

2. Kothari, C.R., Research Methodology", Methods and Techniques, New Age International, 6th Edition, 2010

3. William G. Zikmund : Business Research Methods, 8th edition, 2015, Cengage Learning

Reference Books:

1. Alan Bryman and Emma Bell: 'Business Research Methods, Third Edition, 2011, OUP

2. Bryman, A and Bell, E. Business Research Methods. Oxford University Press, New Delhi, 2015

Web Links:

1. https://research-methodology.net/sampling-in-primary-data-collection/#google_vignette
2.https://www.youtube.com/watch?v=Fn_IyDK2JA8&list=PLBd-6Jg4BqVNoGZEYXmd-cuXL4d8qyc0p

COURSE OUTCOMES

CO1:	Understand advanced methods, analysis, classifications, and systematic data application for project design.	**K 3**
CO2:	Generate ideas, pinpoint core business issues, formulate research problems based on study scope, objectives, and theoretical relevance.	**K 6**
CO3:	Examine prior literature to grasp solutions, theories, methods, and conceptual frameworks relevant to the identified problem.	**K 4**
CO4:	Analyze and justify how variables in the conceptual model correlate with theory and outcomes from relevant literature.	**K 5**
CO5:	Recognize ethical importance, considering business, respondents, culture, and integrity impacts.	**K 4**

MAPPING OF COURSE OUTCOMES TO PROGRAM OUTCOMES

	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**
CO1	**3**	**2**	**-**	**2**	**-**	**3**	**-**	**3**
CO2	**3**	**2**	**2**	**-**	**2**	**3**	**-**	**2**
CO3	**1**	**1**	**1**	**-**	**-**	**3**	**-**	**2**
CO4	**3**	**3**	**-**	**-**	**3**	**-**	**-**	**-**
CO5	**3**	**3**	**-**	**-**	**2**	**1**	**-**	**3**

25CMBF22	MARKETING MANAGEMENT	4	0	0	4

Course Objectives

- To understand the basics of market, marketing, marketing environment andbusiness environment and its domain knowledge
- To analyze the core concepts in marketing concepts, critical thinking, problemsolving an analysis.
- To apply the market segmentation, Target market and Market Positioningstrategies in the current market scenario.
- To understand the concepts of Global market.

UNIT I	Introduction to Marketing Management	12 Hours

Understanding the term Marketing with a global context -Importance of Marketing-Scope of Marketing- Marketing Philosophy – Holistic Marketing Philosophy - Core Concepts - Company Orientation toward marketplace- Pillars of Marketing and Customer Value - Marketing Environment-Micro and Macro Environment.

UNIT II	Consumer Markets	12 Hours

Consumer Markets: Model of Consumer Behavior, The Howard Sheth Model of Buying Behaviour - The Nicosia Model - The Engel-Kollat-Blackwell Model, - Factors Affecting Consumer Behaviour - Strategies in the adopt in process – Cross cultural consumer behaviour – Consumer behaviour in global markets.

UNIT III	Market Segmentation	12 Hours

Market Segmentation: Levels and Bases for Segmentation, Segmenting Consumer Markets, Business Markets, Market Targeting -Evaluating Market Segments -Product Positioning for competitive advantage, Positioning Strategies.

UNIT IV	Marketing Programme	12 Hours

Marketing Programme: Decisions Involved in Product, Branding, Packaging, Product Extension Strategies - Product Line and Product Mix Decisions, New Product Development, Product Life Cycle. Pricing Products, Strategies, Distribution -Channels, Channel Management Decisions, Promotion Mix - Advertising, Sales Promotion, Public Relations, Personal Selling, Promotion Decisions

UNIT V	Tapping Into Global Marketing	12 Hours

Tapping into Global Markets - Competing on a Global Basis - Deciding Whether to Go Abroad - Deciding Which Markets to Enter - How Many Markets to Enter - Developed versus Developing Markets - Evaluating Potential Markets - Deciding How to Enter the Market - Indirect and Direct Export - Licensing -- Joint Ventures - Direct Investment--Deciding on the Marketing Program -Global Similarities and Differences -Marketing Adaptation-Global Product Strategies -Global Communication Strategies-Global Pricing Strategies- Global Distribution Strategies. Case study: Marketing strategy Implementation; Market Segmentation / Targeting / Positioning. Product Levels, Pricing / Global Markets – Applications of AI in Marketing

TOTAL : 60 Hours

TEXT BOOKS:

1. Philip Kotler and Kevin Lane Keller, Marketing Management, PHI 15th Edition, 2015
2 K.S.Chandrasekar. (Reprint 2014). Marketing Management Text and Cases, Tata McGraw. Hill, New Delhi

REFERENCE BOOKS:

1. Rajan Saxena, Marketing Management, 2019, McGraw-Hill
2. Ramaswamy V.S. Namakumari S, Marketing Management - The Indian Context, Macmillan India Ltd, 2018.

WEB SOURCES:

- https://www.iedunote.com/marketing
- https://www.omniconvert.com/blog/consumer-behavior-in-marketing-patterns-types-segmentation.
- https://hbr.org/1986/05/customizing-global-marketing.
- https://www.economicsdiscussion.net/marketing-management/what-is-marketing management/31788
- https://www.indeed.com/hire/c/info/marketing-management
- https://online.york.ac.uk/what-is-global-marketing-and-why-is-it-important/

COURSE OUTCOMES:

CO1:	Relate the corporate function of marketing.	**K3**
CO2:	Outline the macro and micro environment in the company's marketingfunction.	**K4**
CO3:	Differentiate the consumer and institutional buyer behaviour.	**K3**
CO4:	Compare and contrast goods and services.	**K4**
CO5:	Define the target segments for the products	**K2**

MAPPING OF COURSE OUTCOMES TO PROGRAM OUTCOMES

	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**
CO1	3	1	_	2	2	_	3	2
CO2	2	2	1	1	3	1	2	3
CO3	3	1	_	2	2	_	3	2
CO4	2	2	1	1	3	1	2	3
CO5	2	-	-	3	1	_	2	1

25CMBF23	INTRODUCTION TO BFSI & FINTECH	4	0	0	4

Course Objectives

- To provide students with a comprehensive understanding of the Banking, Financial Services, and Insurance (BFSI) sector, and the emerging role of Financial Technology (Fintech) in transforming financial systems. The course aims to equip students with the knowledge of how traditional financial services are being reshaped through innovation and technology.

UNIT I	OVERVIEW OF BFSI SECTOR	12 Hours

Introduction to BFSI: Meaning, Structure, and Scope-Components: Banking, Financial Services, Insurance-Evolution and Growth of the BFSI Sector in India and Globally-Role of RBI, SEBI, IRDAI, and other regulatory bodies-Trends and Challenges in the BFSI Industry-Importance of BFSI in Economic Development

UNIT II	BANKING SECTOR – TRADITIONAL TO DIGITAL	12 Hours

Types of Banks: Commercial, Cooperative, Development Banks-Functions of Banks – Primary, Secondary, and Modern Services-Core Banking Systems (CBS)-Digital Banking: Mobile Banking, Internet Banking, Neo Banks-Payment Systems: UPI, IMPS, RTGS, NEFT-Cybersecurity and Risk Management in Digital Banking

UNIT III	FINANCIAL SERVICES AND INSURANCE	12 Hours

Overview of Financial Services: Investment Banking, Asset Management, Wealth Management, Credit Rating-Introduction to Insurance: Life and Non-life Insurance-Insurance Products and Distribution Channels-Regulatory Framework for Insurance – IRDAI Guidelines

-Banc assurance and Insurance Aggregators-Technology in Insurance – InsurTech Innovations

UNIT IV	INTRODUCTION TO FINTECH	12 Hours

Definition and Scope of Fintech-Evolution of Fintech – From Traditional Finance to Digital Disruption-Fintech Ecosystem: Startups, Incubators, Investors, and Regulators-Fintech Technologies: AI/ML, Blockchain, Cloud Computing, APIs-Key Fintech Segments: Digital Payments, Lending, Robo-Advisory, Crowdfunding, Crypto Assets-RegTech and SupTech – Role in Compliance and Supervision

UNIT V	APPLICATIONS AND TRENDS IN BFSI & FINTECH	12 Hours

Digital Lending Platforms and NBFCs-Peer-to-Peer (P2P) Lending and Buy Now Pay Later (BNPL) Models-Open Banking and API Economy-Financial Inclusion through Fintech-Central Bank Digital Currency (CBDC) and Cryptocurrencies-Future Trends: Embedded Finance, DeFi, Green Fintech

TOTAL : 60 Hours

Text Books:

1. "FinTech and the Transformation in Financial Services" – by Dr. R.K. Gupta
2. "Banking, Financial Services and Insurance (BFSI)" – by Dr. R.S. Soni

Reference Books:

1. "The FINTECH Book" – by Susanne Chishti and Janos Barberis
2. "Digital Bank: Strategies to Launch or Become a Digital Bank" – by Chris Skinner
3. Reports from RBI, NITI Aayog, World Bank, and McKinsey on BFSI and FinTech

Web Links:

1. https://businessanalyst.techcanvass.com/what-is-bfsi-domain/
2. https://en.wikipedia.org/wiki/BFSI
3. https://www.investopedia.com/terms/f/fintech.asp
4. https://www.mckinsey.com/featured-insights/mckinsey-explainers/what-is-fintech

COURSE OUTCOMES

CO1:	Recall BFSI sector components and functions	**K2**
CO2:	Understand FinTech evolution and its role	**K4**
CO3:	Apply FinTech tools in BFSI operations	**K2**
CO4:	Analyze trends like blockchain, AI in FinTech	**K3**
CO5:	Evaluate risks and regulatory mechanisms	**K5**

MAPPING OF COURSE OUTCOMES TO PROGRAM OUTCOMES

	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO 3**
CO1	**3**	**1**	**-**	**2**	**2**	**-**	**3**	**2**
CO2	**3**	**1**	**-**	**2**	**2**	**-**	**3**	**2**
CO3	**2**	**2**	**1**	**1**	**3**	**1**	**2**	**3**
CO4	**2**	**-**	**-**	**3**	**1**	**-**	**2**	**1**
CO5	**1**	**3**	**2**	**-**	**2**	**2**	**1**	**2**
CO1	**3**	**1**	**-**	**2**	**2**	**-**	**3**	**2**

25CMBF24	FINANCIAL MANAGEMENT	3	1	0	4

Course Objectives

- To provide students with a comprehensive understanding of financial terminology, principles, and concepts such as time value of money, risk and return, financial markets, and financial instruments.
- To enable students to apply financial theories and tools to real-world situations through case studies, simulations, and projects.
- To provide an overview of financial markets and instruments, including stocks, bonds, derivatives, and alternative investments, and how they are traded and priced.

UNIT I	INTRODUCTION	12 Hours

Financial Management: Meaning, nature and scope of finance; financial goal - profit vs. wealth maximization; Investment, Financing and Dividend decisions - Finance functions – organization structure – Functions of Finance manager in 21st century – Modern role - treasurer and controller. Emerging role of finance managers – Sources of long-term finance - Time Value of Money – Financial planning

UNIT II	INVESTMENT DECISION	12 Hours

Capital Budgeting: Nature of investment decisions; Investment evaluation criteria - net present value, internal rate of return, profitability index, payback period, accounting rate of return:NPV and IRR comparison; Capital rationing; Risk analysis in capital budgeting

UNIT III	SOURCES OF FINANCE	12 Hours

Cost of Capital: Meaning and significance of cost of capital: Calculation of cost of debt, preference capital, equity capital and retained earnings; Combined cost of capital (weighted); Cost of equity and CAPM; Leverages: Meaning and types of leverages in business – Financial leverage and its impact on EPS – Operating leverage – combined leverage – degree of leverages.

UNIT IV	FINANCING AND DIVIDEND DECISIONS	12 Hours

Capital Structure decisions – Capital Structure & Market value of a firm. Theories of capital structure – NI approach, NOI approach, Modigliani Miller approach, traditional approach. Arbitrage process in capital structure. Planning the capital structure: EBIT and EPS analysis. ROI & ROE analysis. Capital structure policy. Dividend decisions – Theories – Stock split – Buyback of shares

UNIT V	LIQUIDITY DECISIONS	12 Hours

Working capital Management – concepts of working Capital – Operating and cash conversion cycle – permanent and variable working capital – Determinants of working capital – issues in working capital – Estimating working capital needs – Receivables management – Inventory management – Cash management – Working capital finance and approaches - Applications of AI in Finance

TOTAL: 60 Hours

Text Books:

1. Financial Management by I M Pandey. Vikas Publication
2. Financial Management: Theory and Practice by Prasanna Chandra.

Reference Books:

1. Financial Management: Theory & Practice" by Eugene F. Brigham and Michael C. Ehrhardt Year: 2020 (16th Edition)
2. Cases in Financial Management" by Joseph M. Sulock and John S. Dunkelberg, Year: 2002(2nd Edition)
3. Principles of Corporate Finance" by Richard A. Brealey, Stewart C. Myers, and FranklinAllen Year: 2019 (13th Edition)

Web Links:

1. https://corporatefinanceinstitute.com/resources/knowledge/trading-investing/financial-markets/
2. https://byjus.com/commerce/what-is-financial-market/
3. Long, medium and short term source of finance:https://efinancemanagement.com/sources-of-finance
4. Investment decision: https://www.economicsdiscussion.net/financial-management/types-of-financial-decisions-in-financial-management/31652

COURSE OUTCOMES

CO1:	Analyze financial health and performance of a company, including profitability, liquidity, solvency, and efficiency	**K4**
CO2:	Outline various capital structure theories and dividend theories	**K2**
CO3:	Analyze cost of capital for long term source of finance	**K4**
CO4:	Asses the critical thinking skills to analyze complex financial problems, evaluate alternative solutions and make sound recommendations based on quantitative and qualitative data.	**K5**
CO5:	Determine working capital management techniques to maximize the shareholders' value	**K5**

MAPPING OF COURSE OUTCOMES TO PROGRAM OUTCOMES

	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**
CO1	2	_	_	_	2	_	2	1
CO2	3	3	2	_	1	2	1	2
CO3	2	3	_	_	1	2	1	2
CO4	1	3	2	_	1	2	1	2
CO5	3	1	_	_	3	_	3	2

25CMBF25	AI AND ML IN FINANCE	4	0	0	4

Course Objectives

- Understand the fundamentals of AI and ML and their role in financial services.
- Learn about the key applications of AI and ML in finance, including trading, risk management, and fraud detection.
- Explore AI-driven innovations in customer service and portfolio management.
- Analyze the ethical and regulatory considerations of using AI and ML in finance.
- Study real-world case studies demonstrating successful AI and ML applications in finance

UNIT I	INTRODUCTION TO AI AND MACHINE LEARNING IN FINANCE	12 Hours

Fundamentals of AI and ML – Definition and evolution – Key concepts: supervised, unsupervised, reinforcement learning – AI/ML in data-driven finance – Tools & Techniques – Python, R, TensorFlow, scikit-learn – Data preprocessing – Deploying models. Case Studies: India – HDFC chatbot, International – JPMorgan COiN.

UNIT II	AI AND ML IN TRADING AND INVESTMENT	12 Hours

Algorithmic Trading – AI in high-frequency trading – Predictive modeling – AI-powered bots – Portfolio Management – ML for optimization, risk analysis – Robo-advisors – AI in asset pricing. Case Studies: India – Zerodha, Groww; International – Goldman Sachs, Betterment.

UNIT III	RISK MANAGEMENT AND FRAUD DETECTION	12 Hours

AI in Risk Management – Credit risk, loan prediction – Market, operational, liquidity risks – Scenario analysis – Fraud Detection – Real-time transaction monitoring – AML/KYC – Suspicious activity detection - Case Studies: India – SBI loan risk, ICICI fraud detection; International – Moody's, PayPal.

UNIT IV	AI IN CUSTOMER SERVICE AND PERSONALIZATION	12 Hours

Customer Service – AI chatbots – NLP for automation – Personalized engagement – Product Personalization – Tailored loans, credit offers, insurance – Behavioral analytics – Financial planning.

Case Studies: India – Axis Bank, Bajaj Finserv; International – Bank of America Erica, Citibank offers.

UNIT V	ETHICAL AND REGULATORY CHALLENGES	12 Hours

Ethics – Algorithmic bias, transparency, accountability – Data privacy – Frameworks for responsible AI – Regulatory Compliance – India's PDP Bill, GDPR – KYC/AML and RegTech - Fairness and oversight. Case Studies: India – RBI AI guidelines, ethical dilemmas; International – EU AI regulation, US mortgage bias.

TOTAL: 60 Hours

Text Books

T1: Patil, A. (2020). Artificial Intelligence in Financial Markets: Cutting Edge Applications for Risk Management, Portfolio Optimization, and Economics. Wiley.

T2: Marr, B. (2022). Artificial Intelligence in Practice: How 50 Successful Companies Used AI and Machine Learning to Solve Problems. Wiley.

Reference Books

R1: Chishti, S., & Barberis, J. (2018). The AI Book: The Artificial Intelligence Handbook for Investors, Entrepreneurs and FinTech Visionaries. Wiley.

R2: Hull, J. C. (2018). Risk Management and Financial Institutions. Wiley.

Web Links

1. https://developers.google.com/machine-learning
2. https://rbi.org.in/Scripts/BS_SpeechesView.aspx?Id=1301
3. https://www.sciencedirect.com/topics/computer-science/financial-technology

COURSE OUTCOMES

CO1	Explain how AI and ML technologies are transforming the financial services industry.	K2
CO2	Apply machine learning techniques to financial datasets for predictive analytics.	K3
CO3	Implement AI tools for trading strategies, risk management, and fraud detection.	K4
CO4	Address ethical and regulatory concerns related to the use of AI and ML in finance	K5
CO5	Analyze case studies of AI and ML applications in various areas of finance.	K6

MAPPING OF COURSE OUTCOMES TO PROGRAM OUTCOMES

	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3
CO1	2					2		
CO2		2	2			1	2	
CO3			3	2		2		
CO4	1			2	2		1	
CO5			2				2	1

25CMBF26	BLOCK CHAIN AND DIGITAL CURRENCY	4	0	0	4

Course Objectives

- Understand the fundamentals of block chain technology and its decentralized nature.
- Explore the history and evolution of digital currencies, including Bit coin and Ethereum.
- Learn about the technical aspects of block chain, including consensus mechanisms and smart contracts.
- Examine the regulatory and legal challenges associated with block chain and Digital Currencies.
- Analyze case studies of block chain use cases in financial services, supply chain management, and digital currencies.

UNIT I	FUNDAMENTALS OF BLOCKCHAIN TECHNOLOGY	12 Hours

Introduction to Block chain – Key concepts – DLT and its impact – Features: decentralization, immutability, transparency, security – Block chain Architecture – Blocks, transactions, nodes, hashes – Consensus: PoW, PoS, others – Forks: hard and soft.

UNIT II	DIGITAL CURRENCIES AND DIGITAL ASSETS	12 Hours

Evolution of Digital Currencies – History from digital cash to Bit coin – Key digital currencies: BTC, ETH, Ripple, stable coins – Mining, wallets, exchanges – DeFi and Tokenization – DEXs, lending, borrowing – NFTs, security and utility tokens – Smart contracts in DeFi.

UNIT III	BLOCKCHAIN BEYOND FINANCE	12 Hours

Applications Across Industries – Supply chains: traceability and fraud prevention – Healthcare: secure records – Governance: ID, voting – FinTech & Cross-Border – Remittances, settlements – KYC/AML using block chain – Transaction cost reduction.

UNIT IV	REGULATORY AND LEGAL ASPECTS	12 Hours

Regulatory Challenges – India, US, EU, global – Taxation, AML rules – CBDCs – Legal & Ethical – IP and smart contracts – Enforceability – Privacy and decentralization issues.

UNIT V	FUTURE TRENDS AND DEVELOPMENTS	12 Hours

Emerging Trends – Quantum-resistance, Layer 2 scaling – DAOs and governance – Impact on banking and markets – Future of Digital Currencies – Stable coins and monetary policy – CBDCs and global trade.

TOTAL: 60 Hours

Text Books

T1: Antonopoulos, A. M. (2017). Mastering Bitcoin: Unlocking Digital Cryptocurrencies. O'Reilly Media.

T2: Mougayar, W. (2016). The Business Blockchain: Promise, Practice, and the Application of the Next Internet Technology. Wiley.

Reference Books

R1: Narayanan, A., Bonneau, J., Felten, E., Miller, A., & Goldfeder, S. (2016). Bitcoin and Cryptocurrency Technologies. Princeton University Press.

R2: Tapscott, D., & Tapscott, A. (2016). Blockchain Revolution. Penguin.

Web Links

1. https://ethereum.org/en/developers/docs/consensus-mechanisms/pos/
2. https://rbi.org.in/scripts/BS_ViewBulletin.aspx
3. https://www.blockchain.com/

COURSE OUTCOMES

CO1	Explain the core concepts and components of block chain technology.	K2
CO2	Understand the role of Digital Currencies and digital assets in modern finance.	K2
CO3	Evaluate the use of block chain in industries beyond finance.	K4
CO4	Assess the regulatory environment for digital currencies in India and globally.	K5
CO5	Develop a basic understanding of smart contracts and decentralized applications (dApps).	K3
CO6	Analyze real-world case studies of block chain and digital currency projects.	K6

MAPPING OF COURSE OUTCOMES TO PROGRAM OUTCOMES

	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3
CO1	**2**					**2**		
CO2		**2**				**1**		
CO3			**3**		**1**		**2**	
CO4				**3**	**2**	**2**		
CO5	**1**		**2**		**2**		**1**	

25CMBF27	HUMAN RESOURCES MANAGEMENT	4	0	0	4

Course Objectives

- To familiarize the students about the different aspects of managing people in the organizations from the stage of acquisition to development and retention
- To make students capable of applying the principles and techniques as professionals for developing human resources in an organization.
- To provide knowledge about management issues related to training, performance, compensation, human factors consideration and compliance with human resource requirements.

UNIT I	PERSPECTIVES IN HUMAN RESOURCE MANAGEMENT	12 Hours

Evolution of Human Resource Management: Concept, Scope, Importance, Objectives - HR policy & procedures - The importance of human capital- Role of human resource manager - Challenges for human resource managers - Trends in human resource policies - Computer applications in human resource management - Human resource accounting and audit.

UNIT II	HUMAN RESOURCE PLANNING AND RECRUITMENT	12 Hours

Importance of Human Resource Planning - Forecasting human resource requirement - Matching supply and demand - Internal and External sources of Human resource - Organizational attraction - Recruitment, Selection, Induction and Socialization – Theories methods and process

UNIT III	TRAINING AND EXECUTIVE DEVELOPMENT	12 Hours

Types of training methods –purpose- benefits- resistance. Executive development programmes – Common practices - Benefits – Self-development – Knowledge management

UNIT IV	PERFORMANCE MANAGEMENT	12 Hours

Purposes of Performance Management, Performance evaluation - Feedback - the control process- importance- methods - grievances - causes- Redressal methods - Punishment and Promotion - Wage & Salary fixation, incentives, bonus, ESOPs. Insurance, Fringe Benefits

UNIT V	CONTEMPORARY ISSUES IN HRM	12 Hours

Contemporary issues in HRM: Talent Management – Health & Safety issues, Work Life Balance, HRD in India, International HRM and emerging horizons of HRM - Applications ofAI in HR

TOTAL : 60 Hours

Text Books:

1. Talya Bauer, Berrin Erdogan, David Caughlin, and Donald Truxillo, Human Resource Management: People, Data, and Analytics" is published by SAGE Publications, published in the year 2020

2. Robert N. Lussier and John R. Hendon, Human Resource Management: Functions, Applications, and Skill Development, SAGE Publications, published in the year 2021

Reference Books:

1. Human Resource Management: Theory and Practice by John Bratton and Jeffrey Gold , published by Palgrave Macmillan in the year 2020
2. Strategic Human Resource Management: Theory and Practice by Michael Armstrong and Paul Thompson is published by Kogan Page in the year 2020

Web Links:

1. https://open.lib.umn.edu/humanresourcemanagement/chapter/1-1-what-is-human-resources/
2. https://www.hrdconnect.com/2019/05/22/what-is-hr-management-in-an-organisation/
3. https://www.thebalancecareers.com/what-is-human-resource-management-1918143

COURSE OUTCOMES

CO1:	Understand the importance of HRM as a field of study and as a central management function	**K 2**
CO2:	Apply the principles and methods of HRM gained through this course for managing human resources at the workplaces.	**K 3**
CO3:	Develop knowledge about management training for executives.	**K 3**
CO4:	Infer the concepts of performance management and to apply it in practice	**K 4**
CO5:	Analyze the contemporary issues in HRM	**K 4**

MAPPING OF COURSE OUTCOMES TO PROGRAM OUTCOMES

	PO1	PO2	PO3	PO4	PO5	PSO1	PSO 2	PSO3
CO1 2	2	-	-	3	1	-	2	1
CO2 3	3	1	-	2	2	-	3	2
CO3 3	3	1	-	2	2	-	3	2
CO4 4	2	2	1	1	3	1	2	3
CO5 4	2	2	1	1	3	1	2	3

25PMBF21	DATA VISUALIZATION USING BI TOOLS	0	0	4	2

Course Objectives

- This course will cover all aspects of creating dashboards, performing calculations, formatting, some very widely used formulas.
- It will enable the students to create, build models and customize graphs, develop advanced solutions on the worksheet in the areas of marketing, finance, statistics, production and human resource and to assemble the proper BI Tools ..

Sample exercises

- Patient Risk Healthcare Dashboard
- Product Availability Dashboard
- Sales Forecast Analysis Dashboard
- Flight Price Analysis Dashboard
- Crime Analysis Dashboard
- Air Quality and Pollution Analysis Dashboard
- Stock Exchange Analysis Dashboard
- Credit Card Fraud Detection Dashboard
- Twitter Sentiment Analysis Dashboard
- Marketing Campaign Dashboard

COURSE OUTCOMES

CO1	Understand the dashboard application skills	K2
CO2	Create a simple, sorted and formatted report	K3
CO3	Create List Reports	K4
CO4	Create Crosstab Reports.	K3
CO5	Demonstrate skills related to graph the data using BI tools	K5

MAPPING OF COURSE OUTCOMES TO PROGRAM OUTCOMES

	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3
CO1	2					1		
CO2		2	2			2		
CO3			3	2			2	
CO4	1		2		1			
CO5			2		2		2	1

25PMBF22	PRACTICAL – MOOC II	0	0	2	1

Course Objectives

- The objective of this course is to take the best teaching learning resources to all
- to create a levelled platform. To make use of the Indian massive online to theaspiring youth of India

The students will select a MOOC course from the Swayam platform.

They will spend 2 Hours per week undergoing this practical MOOC courseunder the guidance of a faculty.

Every course will have a minimum of 8 to a maximum of 12 assignments depending on the duration of the course.

Assignments will be submitted as per the requirements of the course.

The marks scored in the assignments will be taken for internal assessment marks.

The students will appear for a final practical exam conducted by VISTAS

COURSE OUTCOMES

CO1:	Understand the latest developments in the field of study.	**K2**
CO2:	Explain the students with latest information about the field of study	**K2**
CO3:	Apply the skills in the business world	**K3**
CO4:	List the various skills gained through this course	**K4**
CO5:	Summarize the concepts for application	**K2**

MAPPING OF COURSE OUTCOMES TO PROGRAM OUTCOMES

	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3
CO1	-	2	-	2	-	1	-	-
CO2	-	1	-	1	-	-	1	-
CO3	1	1	1	1	-	-	-	-
CO4	-	2	-	1	-	-	-	-
CO5	1	2	-	-	-	-	-	1

25PMBF23	PRACTICAL – PROFESSIONAL UPSKILLING II	0	0	2	1

COURSE OBJECTIVES

- To improve the interpersonal skills, soft skills, effective team player and analyze strength and weakness to meet their professional career.
- To improve the leadership quality, team management, quantitative analyzing knowledge to meet their professional career.

UNIT I	ADVANCED WORKPLACE COMMUNICATION	6 Hours

Engaged Listening - Grooming & Work Ethics - Assumptions/Perceptions vs. Reality - Reflection on your experience & improvement - Team Bonding/Building activities – Listening Skills - Attitude & Behaviour

UNIT II	PERSONALITY DEVELOPMENT	6 Hours

SWOT Analysis - Time Management – Sympathy vs. Empathy - Conflict resolution and negotiation - Self-awareness - Self-regulation - Procrastination and how to overcome it

UNIT III	ADAPTABILITY AND PROBLEM-SOLVING	6 Hours

Scenario based situation Handling - Embracing change - Critical thinking and analytical skills - Creativity and innovation - Building a professional network - Integrity and honesty - - Professional development and continuous learning.

UNIT IV	QUANTITATIVE APTITUDE I	6 Hours

Percentage – Profit Loss -Discount – Ratio Proportion – Time & Work – Time, Speed & Distance. Problems relating to ages- Permutation & Combination-Probability.

UNIT V	QUANTITATIVE APTITUDE II	6 Hours

Mensuration Clocks and Calendars- Boats-Simple Interest –Compound Interest- Fractions and Decimals – Square roots – Functions. Logical and Reasoning questions for interview.

TOTAL: 30 Hours

TEXT BOOKS

1. Dr. R.S. Aggarwal ,A Modern Approach to Verbal & Non-Verbal Reasoning/QuantitativeAptitude, , Sulthan Chand & Company Ltd, 24th Edition, 2023.

2. Barun Mitra , Personality Development and Soft Skills,Oxford Publication, 2nd Edition,2016

REFERENCE BOOKS

1. Stephen R. covey , Seven habits of Highly Effective people, Simon & Schuster publication , 12th Edition, 2020.
2. Neeru Vasishth, Vibhuti Vasisht, Principles and Practices of Management, Taxmann publication, 1st Edition 2022.

WEB LINKS

1. https://www.thomas.co/resources/type/hr-guides/what-are-big-5-personality- traits
2. https://leverageedu.com/blog/quantitative-aptitude/

COURSE OUTCOMES

CO1	Outline procurement management core concepts and lifecycle.	**K2**
CO2	Develop and relate strategic sourcing skills for optimizing procurement strategies.	**K2**
CO3	Demonstrate inventory types, valuation methods and control techniques.	**K2**
CO4	Analyse application of MRP and JIT systems for efficient inventory control.	**K4**
CO5	Formulate warehouse layout design and distribution management principles.	**K5**

MAPPING OF COURSE OUTCOMES TO PROGRAM OUTCOMES

	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PSO1**	**PSO2**	**PSO3**
CO1	**3**	1		**2**	1	**1**		**1**	**1**	2	
CO2	**3**	1		2	**1**	**1**		**1**	**1**	2	
CO3	**2**	2	**1**	1	2	**2**	**1**	**2**	**2**	**1**	**2**
CO4	**1**	3	**2**		3	**3**	**2**	**3**	**3**	**2**	**1**
CO5		2	**3**	-	2	**2**	**3**	**2**	**2**	**3**	

SEMESTER III

25EMBF31	FINANCIAL ANALYTICS	3	0	0	3

Course Objectives

- To provide a strong foundation in financial analytics in order to handle complex financial data, build advanced analytical models and deliver effective visualization product and comprehensive reports.

UNIT I	INTRODUCTION TO FINANCIAL ANALYTICS	9 Hours

Introduction to Financial Data and Financial Analytics: Definition, relevance and scope financial Analytics – importance of financial analytics – types – fundamental and technical analysis –components of financial analytics - recent trends in financial analytics

UNIT II	FINANCIAL TIME SERIES	9 Hours

Financial Time Series and Their Characteristics: Asset Returns, Distributional Properties of Returns, Review of Statistical Distributions and properties of financial time series

UNIT III	PORTFOLIO ANALYTICS	9 Hours

Asset Portfolio Models: Basics of portfolio construction, Markowitz Theorem, Capital Asset Pricing Model, Diversification and Portfolio Optimization

UNIT IV	ADVANCED FINANCIAL ANALYTICS AND FORECASTING	9 Hours

Introduction to financial forecasting-Forecasting techniques-moving averages, exponential smoothing, regression models -Application of machine learning in financial forecasting - Role and techniques of technical analysis -RSI, ROC, MACD, moving average, candlestick patterns- Tools and best practices for effective visualization of financial analytics.

UNIT V	APPLICATIONS OF DATA SCIENCE AND BUSINESS ANALYTICS IN FINANCE	9 Hours

Financial Data Science Applications - Data science in various financial services: credit risk assessment, fraud detection, algorithmic trading, robo-advisory - Use of artificial intelligence and machine learning in financial decision support - Data-Driven Modeling and Automation - Data processing, cleaning, organization, and validation techniques in finance - Building and validating predictive models for different financial problems.

TOTAL: 45 Hours

Text Books

T1: James, G., Witten, D., Hastie, T., & Tibshirani, R. (2021). An Introduction to Statistical Learning. Springer.

T2: Tucker, J. (2020). Financial Analytics with R: Building a Laptop Laboratory for Data Science. CRC Press.

Reference Books

R1: Fabozzi, F. J. (2020). Financial Modeling of the Equity Market. Wiley. R2: Hull, J. C. (2018). Risk Management and Financial Institutions. Wiley.

Web Links

https://www.investopedia.com/terms/f/financial-analysis.asp
https://www.r-project.org/
https://powerbi.microsoft.com/

COURSE OUTCOMES

CO No.	Course Outcome Statement	Knowledge Level
CO1	Analyse financial data to provide strategic insights for decision-making.	K3
CO2	Build predictive models to forecast financial outcomes.	K4
CO3	Create dynamic dashboards and visualizations for financial reporting.	K5
CO4	Apply optimization and risk management techniques to financial problems.	K5
CO5	Utilize freeware tools to implement financial analytics solutions.	K6

MAPPING OF COURSE OUTCOMES TO PROGRAM OUTCOMES

CO \ PO / PSO	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3
CO1	3					2		
CO2		3	2				2	
CO3			3		1	1		
CO4				3	2	2		
CO5	1		2		2		1	

25EMBF32	DATA VISUALIZATION TECHNIQUES AND REPORTING	3	0	0	3

Course Objectives

- ➢ To Design data visualizations that incorporate best practices to explain findings clearly and honestly.
- ➢ To Develop communications strategically with audiences in mind
- ➢ To Present data verbally with increased comfort and clarity.

UNIT I	INTRODUCTION	9 Hours

Introduction to data visualizations – The importance of context Exploratory vs. explanatory – analysis– Illustrate: Who, What & How – Story boarding.

UNIT II	BASIC PRINCIPLES OF VISUALIZATION	9 Hours

Visually encoding data – Choosing graphic Forms – A Grain of Salt – Organizing the Display – Exploring Data with Simple Charts – Visualizing Distributions – Seeing Relationships – Mapping Data.

UNIT III	ELIMINATING THE CLUTTER	9 Hours

Clutter – Gestalt principles of visual perception – Lack of visual order – Non-strategic use of Contrast – Decluttering: Step-by-step.

UNIT IV	COGNITION	9 Hours

The EYE and the Visual brain – Visualizing for the mind – Images in the Head – Creating Information Graphics – Interactive Graphics.

UNIT V	VISUAL ANALYTCS, STORY TELLING & BIG DATA	9 Hours

Story telling principles: Gricean Maxims – Barbara Minto's pyramid principle – Seven steps of storytelling – Scenario for combining data, model and stories – Five golden rules for statistical story tellers.

TOTAL: 45 Hours

TEXT BOOKS:

1. Kieran Healy, Data Visualization: A Practical Introduction, PUP, New Jersey, 2019, First Edition.
2. Alberto Cairo. The Truthful Art: Data, Charts, and Maps for Communication. New Riders, 1 edition
3. Cole Nussbaumer Knaflic, Story Telling with Data: A Data visualization Guide for Business Professionals, Wiley, New Jersey;2015, First Edition

REFERENCE BOOKS:

1. Scott Berinato, Good Charts: the HBR Guide to Making Smarter, more persuasive Data Visualization, HBR. 2016
2. Edward R. Tufte. The Visual Display of Quantitative Information. Graphics Press, 2 ed.

WEBSITES:

1. https://www.tableau.com/learn/articles/data-visualization.
2. https://online.hbs.edu/blog/post/data-visualization-tools.

WEB SOURCES:

1. https://www.stat.nus.edu.sg/data-analytics-and-visualization-for-managers.
2. https://www.managementconcepts.com/course/id/4606.

COURSE OUTCOMES

CO1	Design effective data visualizations in order to provide new insights into research.	K2
CO2	Understand how Cultures of Practice influence the way data.	K3
CO3	Handle data and data visualizations to understand of ethical considerations.	K4
CO4	Properly document and organize data and visualizations	K5
CO5	Construct effective data visuals to solve workplace problems.	K6

MAPPING OF COURSE OUTCOMES TO PROGRAM OUTCOMES

	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3
CO1	2					1		
CO2	3	2					2	
CO3		2	3			1		
CO4				2	2	2		
CO5	1		2		1		1	

25EMBF33	DIGITAL DEVELOPMENT IN FINANCIAL TECHNOLOGY	3	0	0	3

Course Objectives

- To identify how Digital Transformation impacts corporate strategies.
- To classify different forms of Digital Disruption
- To choose appropriate concepts and theories for developing business models

UNIT-I	INTRODUCTION TO DIGITAL FINANCIAL TECHNOLOGY	9 Hours

Definition and scope of FinTech - Historical evolution and key milestones in digital finance-Drivers of digital transformation: regulation, consumer demand, technology -Overview of digital business models in finance -Emerging players: startups, big tech, traditional financial institutions -Regulatory framework and introduction to RegTech.

UNIT-II	DIGITAL PAYMENTS AND BANKING INNOVATIONS	9 Hours

Digital payments landscape: wallets, UPI, RTGS, IMPS, NEFT, international platforms - Digital banking evolution: neobanks, challenger banks, mobile banking apps - KYC, onboarding, and security in digital banking - Digital insurance: InsurTech platforms and smart policy management.

UNIT-III	BLOCKCHAIN, CRYPTO ASSETS, AND DECENTRALIZED FINANCE (DEFI)	9 Hours

Blockchain, Crypto Assets, and Decentralized Finance (DeFi) - • Blockchain fundamentals: distributed ledgers, consensus mechanisms - Cryptocurrencies: Bitcoin, Ethereum, stablecoins. Applications of blockchain beyond currency: smart contracts, identity, supply chain. Regulatory challenges and opportunities in blockchain and crypto.

UNIT-IV	DATA, AI AND ANALYTICAL DEVELOPMENTS IN FINTECH	9 Hours

Big data and analytics in the financial sector - Artificial Intelligence (AI) and Machine Learning (ML) applications: credit scoring, robo-advisory, algorithmic trading, fraud detection - Real-time data processing: IoT, high-frequency trading, predictive analytics. API economy and open banking - Digital security: cyber risk management, privacy, and compliance.

UNIT-V	GLOBAL TRENDS, POLICY, AND FUTURE DIRECTIONS	9 Hours

Global FinTech ecosystems: US, Europe, China, India, Africa - Policy and regulatory frameworks: digital identity, data sovereignty, privacy - ESG, Green FinTech, and social impact - Cloud computing and enterprise solutions in FinTech - Generative AI, embedded finance, RegTech, supervisory technology.

TOTAL: 60 Hours

Text Books:

- **P. Raghunatha Reddy & S. Ramachandra Reddy** – *FinTech: The Technology Driving Disruption in the Financial Services Industry*
  Publisher: Himalaya Publishing House
- **B. Y. Srinivas** – *Financial Technology (FinTech): Principles and Applications*
  Publisher: Kalyani Publishers
- **Dr. Sanjay Sharma & Bharath S.** – *Digital Finance and Financial Inclusion*
  Publisher: Oxford University Press

Reference Books:

4. **Susanne Chishti & Janos Barberis** – *The FINTECH Book: The Financial Technology Handbook for Investors*

Web Links:

1. https://www.finextra.com
2. https://www.bis.org
3. https://www.cfainstitute.org

COURSE OUTCOMES (COs):

CO1:	Explain foundational concepts and evolution of digital financial technology	**K2**
CO2:	Analyze and compare digital payment systems, banking innovations, and digital insurance platforms	**K4**
CO3:	Demonstrate understanding of blockchain, crypto assets, and decentralized finance	**K2**
CO4:	Apply analytics, Artificial Intelligence, and Machine Learning in financial product development	**K3**
CO5:	Explain foundational concepts and evolution of digital financial technology	**K5**

MAPPING OF COURSE OUTCOMES TO PROGRAM OUTCOMES (POs):

	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO 3
CO1	**3**	**1**	**-**	**2**	**2**	**-**	**3**	**2**
CO2	**3**	**1**	**-**	**2**	**2**	**-**	**3**	**2**
CO3	**2**	**2**	**1**	**1**	**3**	**1**	**2**	**3**
CO4	**2**	**-**	**-**	**3**	**1**	**-**	**2**	**1**
CO5	**1**	**3**	**2**	**-**	**2**	**2**	**1**	**2**

25EMBF34	CYBER SECURITY IN FINTECH	3	0	0	3

Course Objectives

- ➢ To gain knowledge of Cyber Crime Ecosystem and the Dark Web.
- ➢ To understand Information Security Governance, Risk & Compliance (GRC).

UNIT I	CYBER THREATS AND RISKS	9 Hours

Cybersecurity in Financial Markets – Types of cybersecurity threats – How to safeguard customer databases - Importance of cybersecurity in financial systems - Regulatory landscape and compliance requirements

UNIT II	CYBER CRIME ECOSYSTEM AND DARK WEB	9 Hours

Concepts of Dark Web & Organized Cyber Crime – Dark Web: Cyber Attacks in India - Law Enforcement Challenges and Investigation Techniques - Legal and Ethical Issues Related to Dark Web Activity

UNIT III	COLLECTION, MANAGEMENT AND PROTECTION OF FINANCIAL DATA	9 Hours

Information Technology Act, 2000 – RBI Guidelines – Introduction to ISO 27001 ISMS – Basic Introduction to ISO 27001- Core Principles and Controls of ISO 27001

UNIT IV	INFORMATION SECURITY GOVERNANCE, RISK & COMPLIANCE (GRC)	9 Hours

Understanding the GRC Framework – Importance of governance, risk management, and compliance in financial cybersecurity- GRC Maturity Models and Assessment - Integration of GRC Tools and Technologies

UNIT V	DATA PRIVACY & NIST CYBER SECURITY FRAMEWORK	9 Hours

NIST Privacy Framework – NIST Cybersecurity Standards – Global relevance of NIST standards in the financial industry.

TOTAL: 45 Hours

Text Books

T1: Nina Godbole and Sunit Belpure. (2020). Cyber Security: Understanding Cyber Crimes, Computer Forensics and Legal Perspectives. Wiley.

T2: Graham, J., Howard, R., & Otson, R. (2011). Cyber Security Essentials. CRC Press. T3: Wu, C.-H., & Irwin, J. D. (2013). Introduction to Cyber Security. CRC Press.

Reference Books

R1: Additional reports and regulatory publications from RBI, ISO, and NIST websites.

Web Links

https://www.rbi.org.in
https://www.iso.org/isoiec-27001-information-security.html
https://www.nist.gov/cyberframework

COURSE OUTCOMES

CO1	Understand different types of cyber threats relevant to the financial sector.	K2
CO2	Analyze the ecosystem of cyber-crime and its impact through the dark web.	K4
CO3	Apply legal frameworks and ISO standards to secure financial data.	K3
CO4	Evaluate the role of governance, risk, and compliance (GRC) in information security.	K5
CO5	Compare and interpret global data privacy standards like NIST in the context of finance.	K5

MAPPING OF COURSE OUTCOMES TO PROGRAM OUTCOMES

CO \ PO / PSO	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**
CO1	**2**					**1**		
CO2		**2**	**2**			**2**	**2**	
CO3			**3**		**2**	**2**		
CO4	**1**			**2**	**1**		**1**	
CO5			**2**	**2**			**2**	**1**

25EMBF35	INVESTMENT ANALYSIS AND PORTFOLIO MANAGEMENT	3	0	0	3

Course Objectives

- To equip the students with the knowledge and skills to construct well-diversified investment portfolios that balance risk and return based on the goals and limits of the investor.
- To understand various methods for evaluating portfolio performance, Techniques of portfolio revision against benchmarks and peers to make informed investment decisionsand monitor performance.

UNIT I	BASICS OF INVESTMENT	9 Hours

Introduction - need for Investment – Investment making process - investment versus speculation - Investment alternatives and their comparison on various parameters as safety - liquidity and growth - investment triangle -Mutual funds, ETFs, and hedge funds - Benefits and costs of fund investing -Choosing a fund type- Portfolio management process.

UNIT II	RISK AND RETURN OF PORTFOLIO	9 Hours

Introduction of Risk and Return - Risk Defined -. Financial analysis, Economic analysis and Capital market analysis -Concepts of risk and return – Measuring portfolio Risk and return - Minimizing the risk and maximizing the return - Risk and reward of stocks and bonds - The normal distribution -Predicting asset returns -Optimal portfolios with two risky assets combining risky assets.

UNIT III	SECURITY ANALYSIS & TRADING	9 Hours

Introduction to security analysis - Primary equity market -. Secondary market and its operations - Stock exchanges in India – BSE, OTCEI, NSE, ISE, and Regulations of stock exchanges – Trading system in stock exchanges –SEBI-. Classification of Security Analysis- Fundamental Analysis- Technical Analysis-Quantitative Analysis Determinants of stock price - Fundamental analysis, - Equity Valuation Models- Event studies - Behavioral finance- - Market and limit orders -short selling and margin - Trading simulation.

UNIT IV	PORTFOLIO MANAGEMENT	9 Hours

Introduction to Portfolio management-. Investment risk pyramid -Capital Allocation to Risky Assets -Optimal Risky Portfolios - Modern Portfolio Theory -Markowitz portfolio theory - Capital Asset Pricing Model –Security market line- capital market line- Arbitrage Price Theory - Random Walk theory and efficient market hypothesis – The efficient market hypothesis - Multifactor Models of Risk and Return.

UNIT V	PORTFOLIO ANALYSIS AND EVALUATION	9 Hours
Portfolio Analysis -Portfolio risk and return- Risk-Reward concept -Benefits of portfolio Diversification- - Strategic versus tactical asset allocation – Methods of calculating portfolio return- Portfolio Revision strategies - Active versus passive portfolio management – Introduction to Mutual fund -Portfolio performance evaluation –Performance measurement tools- Treynor,, Sharpe, and Jensen ratios- Monitoring and revision of the portfolio- Techniques of portfolio revision-Constant-Rupee-Value Plan- Constant Ratio Plan- VariableRatio Plan.		

TOTAL: 45 Hours

Text Books:

1. Donald E.Fischer& Ronald J.Jordan, "Security Analysis and Portfolio Management", PHILearning, 8th Edition,2020

2. Kevin, "Securities Analysis and Portfolio Management", PHI Learning, 13th Edition, 2021.

Reference Books:

Reilly & Brow, "Investment Analysis and Portfolio Management", Cengage Learning, 9th Edition, 2021

V.A.Avadhan, "Securities Analysis and Portfolio Management", Himalaya Publishing House,2021.

Web Links:

1:https://theintactone.com/2019/07/25/iapm-u5-topic-1-portfolio-management-and-performance-evaluation/

2:https://theintactone.com/2019/07/25/iapm-u5-topic-1-portfolio-management-and-performance-evaluation/

COURSE OUTCOMES

CO1:	Explain the investment environment, the investment management and planning.	**K2**
CO2:	Relationship between risk and return in investments, including how to assess and measure risk, and how different investment strategies affect potential returns.	**K3**
CO3:	Opportunity to gain insights into analyzing individual securities, employing fundamental and technical analysis techniques to assess investment prospects.	**K4**
CO4:	Evaluate various portfolio management strategies, asset allocation in portfolio management and risk and return in efficient portfolio.	**K5**
CO5:	Compare the performance of investment portfolios relative to benchmarks and peer group performance.	**K6**

MAPPING OF COURSE OUTCOMES TO PROGRAM OUTCOMES

	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**
CO1	2	-	-	3	1	-	2	1
CO2	3	1	-	2	2	-	3	2
CO3	2	2	1	1	3	1	2	3
CO4	1	3	2	-	2	2	1	2
CO5	-	2	3	-	1	3	-	1

25EMBF36	FINTECH REGULATION & ETHICS	3	0	0	3

Course Objectives

- To provide a comprehensive understanding of the regulatory landscape governing fintech innovations.
- To examine the ethical principles and governance frameworks applicable to digital financial services.
- To equip learners with the knowledge to identify and address legal, cybersecurity, and compliance challenges in the fintech ecosystem.

UNIT - I	INTRODUCTION TO FINTECH ECOSYSTEM AND GLOBAL	9 Hours

Evolution and Definition of Fintech – Key Fintech Segments: Payments, Lending, Insurance, Wealth Tech, Reg Tech – Fintech Business Models and Value Chains – Regulatory Challenges of Emerging Technologies – Role of Central Banks and Financial Regulators – Regulatory Sandboxes: Concept and Global Practices – Open Banking and API Governance – Fintech Licensing and Compliance Requirements – Global Fintech Regulations: US, UK, EU, Singapore, India – Role of BIS, IMF, and World Bank in Fintech Regulation – Cross-border Fintech Activities and Regulatory Cooperation – India's Fintech Vision and Role of RBI, SEBI, IRDAI

UNIT - II	INDIAN LEGAL ARCHITECTURE GOVERNING FIN	9 Hours

Payment and Settlement Systems Act, 2007 – RBI Guidelines on Digital Lending – SEBI Guidelines on Robo-Advisory and Investment Platforms – IRDAI Framework on Insurtech and Digital Policies – P2P Lending Regulations in India – Role of NPCI in UPI and Digital Payments Ecosystem – KYC/AML/CFT Norms under PMLA – Aadhaar and UIDAI in Digital Verification – Data Localization Requirements and RBI's Mandates – Regulatory Oversight of Cryptocurrencies and Virtual Assets – Account Aggregators and Consent Architecture (DEPA) – Fintech and GST, Taxation, and Regulatory Reporting

UNIT-III	ETHICS, GOVERNANCE, AND RESPONSIBLE FINTECH PRACTICES	9 Hours

Ethical Foundations in Financial Technology – Principles of Responsible Innovation in Fintech – Algorithmic Bias and Fairness in AI-driven Finance – Ethical Challenges in Robo-Advisors and Automated Lending – Transparency, Disclosure, and Consumer Consent – Responsible Data Use and Ownership Rights – Conflict of Interest in Digital Financial Advisory – Cybersecurity Ethics and Fraud Prevention – ESG Integration in Fintech Models – Whistleblower Protection and Internal Ethics Policies – Governance Frameworks for Fintech Startups – Code of Conduct for Fintech Professionals

UNIT-IV	**MANAGING DATA, SECURITY, AND RISKS IN FINTECH ENVIRONMENTS**	**9 Hours**

Data Protection Laws (DPDP Act, GDPR, etc.) – Cybersecurity Frameworks: NIST, ISO 27001 – Consent Architecture and Personal Data Processing – Cyber Threats in Fintech: Phishing, Malware, Ransomware – Security in APIs, Cloud Infrastructure, and Blockchain – Incident Reporting and Breach Notification Norms – Risk Assessment Models in Digital Financial Services – Secure Digital Identity and Authentication – Role of CERT-In, DSCI in India – Digital Fraud Detection and Redressal Mechanisms – Cyber Insurance for Fintechs – Fintech Compliance with Tech Risk Guidelines by RBI/SEBI

UNIT V	**EMERGING TRENDS, INNOVATIONS, AND ETHICAL DILEMMAS**	**9 Hours**

CBDCs and Ethical Implications of Digital Currencies – AI & ML in Fintech: Opportunities and Risks – Decentralized Finance (DeFi) and Regulatory Gaps – Embedded Finance and Invisible Banking – NFTs and Tokenization in Financial Services – Ethics of Surveillance and Behavioural Scoring – RegTech and SupTech: Opportunities for Regulators – Cross-sectoral Regulation (e.g., Health + Fintech) – Digital Inclusion vs Digital Discrimination – Green Fintech and Sustainable Finance – The Role of Ethics Committees in Fintech Firms – Future of Fintech Regulation: Self-Regulation vs Government Oversight.

Total Hours – 45 Hours

Text Books

1. **Arner, D. W., Barberis, J., & Buckley, R. P.** *The Reg Tech Book: The Financial Technology Handbook for Investors, Entrepreneurs and Visionaries* Publisher: Wiley, 2019 ISBN: 9781119362142
2. **Anshari, M., Almunawar, M. N., Masri, M., & Hamdan, M.** *FinTech and Islamic Finance: Digitalization, Development and Disruption* Publisher: Routledge, 2022 ISBN: 9781032125759

Reference Books

1. **Douglas J. Cumming & Sofia A. Johan** *FinTech: Law and Regulation* Publisher: Elsevier, 2021 ISBN: 9780128202416
2. **Chris Brummer** *Fintech Law in a Nutshell* Publisher: West Academic Publishing, 2019 ISBN: 9781684671314

COURSE OUTCOMES

CO1	Understand the evolution, business models, and global regulatory frameworks of the fintech ecosystem.
CO2	Analyze the Indian regulatory structure governing digital payments, lending, investment platforms, and compliance mechanisms.
CO3	Apply ethical principles and governance standards to assess the integrity and responsibility of fintech services.
CO4	Evaluate data privacy, cybersecurity, and digital risk management frameworks relevant to fintech operations.
CO5	Critically assess emerging fintech innovations and their associated ethical, legal, and regulatory challenges.

MAPPING OF COURSE OUTCOMES TO PROGRAM OUTCOMES

	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3
CO1	3	1	1	3	-	2	3	0
CO2	2	2	-	2	2	1	2	1
CO3	3	-	1	2	1	2	3	2
CO4	3	2	1	3	-	2	3	2
CO5	3	3	1	3	3	2	3	-

25EMBF37	FINTECH PRODUCT DEVELOPMENT	3	0	0	3

Course Objectives

- Understand the fundamental concepts and evolution of fintech.
- Analyze key fintech business models and product development processes.
- Explore regulatory, security, and compliance considerations in fintech products.
- Apply innovative technologies in designing and developing fintech products.

UNIT I	INTRODUCTION TO FINTECH	9 Hours

Definition, scope, and evolution of fintech - Trends in digital banking, payments, lending, and wealth management - Impact on traditional financial institutions - Drivers of fintech growth: customer expectations, technological advances, regulation.

UNIT II	FINTECH BUSINESS MODELS	9 Hours

Payments, lending, neo banking, robo -advisors, Insur Tech, Reg Tech - Marketplace lending, crowd funding, block chain applications - Revenue streams and customer acquisition strategies - Fintech Business Models - Partnerships between banks and fin tech startups: benefits and challenges.

UNIT III	PRODUCT DEVELOPMENT LIFE CYCLE IN FINTECH	9 Hours

Ideation, MVP, market research, prototyping - Regulatory considerations and compliance - Security, privacy, and risk management in product development - Integration with legacy banking systems and overcoming related challenges.

UNIT IV	TECHNOLOGY IN FINTECH PRODUCT DEVELOPMENT	9 Hours

APIs, mobile platforms, cloud computing- Artificial intelligence, machine learning, big data analytics - Cryptography and block chain case studies - Open banking and the impact of PSD2 and similar regulations – Cyber security threats unique to fintech and mitigation strategies.

UNIT V	FINTECH PROJECT AND CASE STUDIES	9 Hours

Product innovation workshops - Startup case studies and failure analysis - Capstone: designing your own fintech product (pitch and report) - Case analysis of regulatory sandbox programs in fintech innovation.

TOTAL : 45 Hours

Text Books:

1. Pranay Gupta & T. Mandy Tham, "Fintech: The New DNA of Financial Services."
2. Jean-Luc Verhelst, "Bitcoin, Blockchain & Cryptoassets: A Comprehensive Introduction."
3. Andrew W. Lo, "Adaptive Markets: Financial Evolution at the Speed of Thought."
4. Anshari, M., et al., "FinTech in Financial Inclusion: Machine Learning Applications in Social Finance."

Reference Books:

5. Arner, D.W., Barberis, J., & Buckley, R. "The RegTech Book: The Transformation of Regulation and Compliance in FinTech, InsurTech and RegTech."
6. Susanne Chishti & Janos Barberis, "The FINTECH Book: The Financial Technology Handbook for Investors, Entrepreneurs and Visionaries."
7. Fredric S. Mishkin, "The Economics of Money, Banking, and Financial Markets."
8. Alex Tapscott & Don Tapscott, "Blockchain Revolution: How the Technology Behind Bitcoin and Other Cryptocurrencies is Changing the World."

Web Links:

1. https://www.finextra.com — Industry news, analysis, and trends in global fintech.
2. https://www.fintechmagazine.com
3. https://thefintechtimes.com
4. https://www.fintechfutures.com

COURSE OUTCOMES

CO1	Define core fintech concepts and trends	K2
CO2	Distinguish between various fintech product types and their development life cycles.	K3
CO3	Evaluate regulatory and ethical aspects affecting fintech products.	K4
CO4	Demonstrate the ability to design a basic fintech product proposal.	K5
CO5	Analyze case studies and real-world fintech product launches.	K6

MAPPING OF COURSE OUTCOMES TO PROGRAM OUTCOMES

	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3
CO1	2					1		
CO2	3		1				2	
CO3		2	3			1		
CO4				2	2	2		
CO5	1		2		1		1	

25EMBF38	FINANCIAL DERIVATIVES	3	0	0	3

Course Objectives

- To understand the concept of Derivatives and its types
- To review the set of modern financial instruments available that a firm can use to optimize the management of the risks the company

UNIT I	INTRODUCTION TO DERIVATIVES AND FORWARD	9 Hours

Introduction to derivatives – History of derivatives - types – necessity for derivatives - Evolution of derivatives in India - Major recommendations of Dr. L C Gupta committee - Derivative trading in NSE/BSE - Introduction to Forward Contracts & its demerits - Pricing of forward contract - Trading mechanism of forward contracts - Calculation of payoff for forward contract

UNIT II	FUTURES CONTRACT	9 Hours

Types of Futures instruments, Pricing of Futures, Lot sizes, Contract months, Expiry, Margins – initial & marked- to-market with calculations, Cost of carry, Roll over - Traders of futures contract = Trading Mechanism, Hedging Mechanism, Arbitrage Mechanisms, and Utility of Hedging Mechanism in managing market risk - Difference between forward and futures contract

UNIT III	OPTIONS CONTRACT	9 Hours

Types of Options, Call & Put Options, Premiums, Strike Prices, Put-Call ratios, SEBI's regulatory framework, Options Strategies, Profit and loss in options, Option pricing, factors affecting opting pricing

UNIT IV	SWAPS CONTRACT	9 Hours

SWAPs - Evolution and features of swaps - Types of swaps - Uses in risk Management and Hedging, different kind of swaps like currency Swaps and interest rate swaps and their working.

UNIT V	RISK MANAGEMENT IN DETIVATIVES	9 Hours

Risk identification and Risk Evaluation, Risk assessment &Management. Risk analysis: Risk control. Types of risks - Portfolio analysis - Probability, statistical measures of risk, Standard deviation, Variance, Coefficient of Variation, Beta, Coefficient of Beta, probability. Portfolio Expected Return, Portfolio Variance and Standard Deviation, Concept of Modern portfolio theory. Value at Risk (VAR) - Monte Carlo simulation, stress testing and back testing. CAPM, Arbitrage Pricing Theory, Sharpe Ration, Treynor Ration, Jensen Index.

TOTAL: -- 45 Hours

Text Books:

1. Hull, John C, Options, Options, futures and other derivatives, Prentice Hall of India,10th edition, 2016
2. Ranganatham and Madhumathi, Derivatives and Risk Management, Pearson, 2017

Reference Books:

1. Kevin, S, Commodity and Financial Derivatives, PHI, 2016
2. Rajiv Srivastav, Derivatives and Risk Management, Oxford University Press, 2015

Web Links:

1. https://onlinecourses.nptel.ac.in/noc24_mg19/previewOnline
2. https://onlinecourses.nptel.ac.in/noc22_mg91/preview

COURSE OUTCOMES

CO1:	Apply knowledge of key financial building blocks used in constructing complex derivative instruments	**K3**
CO2:	Analyze and evaluate the futures market	**K4**
CO3:	Compute call and put option payoffs	**K6**
CO4:	Distinguish the different swap contracts	**K4**
CO5:	Comprehend the steps in management of risk	**K2**

MAPPING OF COURSE OUTCOMES TO PROGRAM OUTCOMES

	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**
CO1	**3**	**1**	**-**	**2**	**2**	**-**	**3**	**2**
CO2	**2**	**2**	**1**	**1**	**3**	**1**	**2**	**3**
CO3	**-**	**2**	**3**	**-**	**1**	**3**	**-**	**1**
CO4	**2**	**2**	**1**	**1**	**3**	**1**	**2**	**3**
CO5	**2**	**-**	**-**	**3**	**1**	**-**	**2**	**1**

25EMBF39	FINANCIAL AND RISK ANALYTICS	3	0	0	3

Course Objectives

- To prepare students for careers in finance, data analysis, and related fields
- To equip students with the analytical skills necessary to understand and interpret financial data effectively.
- To enhance students' ability to make informed financial decisions and risk management in finance.

UNIT I	INTRODUCTION TO FINANCIAL ANALYTICS	9 Hours

Introduction to Financial Analytics- Importance of Financial Analytics – Types of Financial Analytics – Fundamental Analysis – Technical Analysis - Component of Financial Analytics – Features of Financial Analytics – **Financial Analytics and Data Analysis** – Implementation of Financial Analytics – Corporate Financial Analytics – Investment Financial Analytics – Financial Analytics and Current Financial Challenges – Fraud - Risk – Profitability – Portfolio Management

UNIT II	FINANCIAL DATA ANALYSIS	9 Hours

Exploratory data analysis (EDA) for financial data- Descriptive statistics, hypothesis testing, regression, data visualization techniques, **Time series analysis**- Trend analysis, seasonality, autocorrelation, stationarity, **Volatility modelling**-Historical volatility, implied volatility, GARCH models-**Correlation and covariance analysis**: Portfolio risk assessment, asset allocation- **Monte Carlo simulation**: Applications in financial modelling, risk assessment, and option pricing, data analysis using Python and R program.

UNIT III	FINANCIAL MODELING AND VALUATION	9 Hours

Introduction to financial modelling: Building blocks, principles, and best practices. **Financial statement analysis**: Ratio analysis, common-size analysis, DuPont analysis. **Discounted cash flow (DCF) analysis**: Valuation methodologies, free cash flow estimation, terminal value calculation. **Equity valuation models**: Dividend discount model (DDM), discounted cash flow (DCF) model, comparable company analysis (CCA), precedent transactions analysis (PTA).**Fixed income securities valuation**: Bond pricing, yield measures, duration, convexity. Building financial models in spreadsheets (Excel)

UNIT IV	RISK MANAGEMENT & INVESTMENT ANALYSIS	9 Hours

Risk management fundamentals: Types of risk (market risk, credit risk, liquidity risk, etc.), risk assessment techniques. Calculation methodologies, interpretation, limitations. **Portfolio theory**: Markowitz portfolio theory, efficient frontier, capital market line. **Asset allocation strategies**: Mean-variance optimization, risk parity, factor-based investing. **Portfolio performance evaluation**: Sharpe ratio, Treynor ratio, Jensen's alpha, tracking error.		
UNIT V	**ADVANCED FINANCIAL ANALYTICS & APPLICATIONS**	**9 Hours**
Machine learning applications in finance: Predictive modelling, classification, clustering, and reinforcement learning. **Algorithmic trading strategies**: Momentum trading, mean reversion, statistical arbitrage. **High-frequency trading (HFT)** and algorithmic trading platforms. **Alternative data sources** and their applications in financial analytics. **Ethical considerations** and regulatory frameworks in financial analytics.		
TOTAL: 45 Hours		

Text Books:

1. Williams, E. E. (2017). Quantitative financial analytics: The path to investment profits. World Scientific Publishing Co Pte Ltd

2. Guida, T., & Hilpisch, Y. (2019). Big data and machine learning in quantitative investment. Wiley

Reference Books:

1. Argimiro Arratia (2014), "Computational Finance an Introductory Course with R", Atlantis Press, ISBN 978-94-6239-069-0.

2. Bernhard Pfaff (2013), "Financial risk modelling and portfolio optimization with R", Wiley, ISBN 978-0-470-97870-2.

Web Links:

1. https://www.mygreatlearning.com/academy/learn-for-free/courses/financial-risk-analyticshttps://www.kopykitab.com/Operations-Research-Theory-And-Applications-6e-by-J-K-Sharma

2. https://www.coursera.org/learn/applying-data-analytics-business-in-finance#syllabus

COURSE OUTCOMES

CO1:	Demonstrate proficiency in analyzing financial data using statistical techniques and tools to derive meaningful insights and trends.	**K2**
CO2:	Construct robust financial models for investment evaluation, risk assessment, and valuation analyses.	**K3**
CO3:	Exhibit sound decision-making skills in finance, applying analytical techniques to make informed decisions across various financial domains.	**K2**
CO4:	Apply proficiency in portfolio optimization techniques, constructing diversified portfolios that align with risk-return objectives.	**K3**
CO5:	Understand and apply their exposure in advanced financial analytics.	**K2**

MAPPING OF COURSE OUTCOMES TO PROGRAM OUTCOMES

	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**
CO1	**2**	**-**	**-**	**3**	**1**	**-**	**2**	**1**
CO2	**3**	**1**	**-**	**2**	**2**	**-**	**3**	**2**
CO3	**2**	**-**	**-**	**3**	**1**	**-**	**2**	**1**
CO4	**3**	**1**	**-**	**2**	**2**	**-**	**3**	**2**
CO5	**2**	**-**	**-**	**3**	**1**	**-**	**2**	**1**

25EMBF40	STARTUP AND INNOVATION MANAGEMENT	3	0	0	3

Course Objectives

- To understand new venture creation opportunities, its resources, and requirements for Enterprise Start-up.
- To describe the concepts of innovation, its types and process.
- To examine and analyze the meaning of innovation, emerging trends in innovation and creation of new business through agile ideas

UNIT I	STARTUP OPPORTUNITIES	9 Hours

Business Start-up – Ideation - Generate Ideas with Brainstorming - Venture Choices - The Rise of The startup Economy - The Six Forces of Change - The Start-up Equation – The Entrepreneurial Ecosystem –Entrepreneurship in India.

UNIT II	STARTUP CAPITAL REQUIREMENTS & FINANCIAL ISSUES	9 Hours

Identifying Startup capital Resource requirements - Feasibility Analysis - The cost and process of raising capital - Develop financial assumptions-Constructing a Process Map - Positioning the venture in the value chain - Unique funding issues of a high-tech venture - Funding with Equity – Financing with Debt-Funding startups with boots trapping-crowd funding-strategic alliances.

UNIT III	LEGAL ENVIRONMENT FOR SURVIVAL, GROWTH & EXIT	9 Hours

The Legal Environment- Approval for New Ventures-Taxes or duties payable for new ventures - Stages of growth in a new venture- Growing with the market & within the industry - Scaling Ventures & life patterns – Preparing for change - Leadership succession - Support for growth and sustainability of the venture - Reasons for new venture failures - Dealing with Failure - Bankruptcy, Exit Strategies - Selling the business - Cashing out but staying in-being acquired - Going Public (IPO) – Liquidation.

UNIT IV	INTRODUCTION TO INNOVATION MANAGEMENT	9 Hours

Innovation Management: Concept of Innovation- Levels of Innovation- types of Innovation- innovation process- Innovative Ideation Methods- Managing innovation within firms - Theories to innovation.

UNIT V	INNOVATION AND DESIGN THINKING	9 Hours

Meaning of innovation - significance of innovation- difference between innovation and invention - emerging trends in innovation – process of innovation – factors influencing innovation - idea generation through innovation – innovative culture- concepts of Design

Thinking - Theory and Practice in design thinking - Tools for design thinking – Stages of Design Thinking – Types - Factors affecting and influencing design thinking - Design Thinking Process, Approach & Techniques.
TOTAL : 45 Hours

Text Books:

T1: Eric Ries,"The Lean Startup: How Today's Entrepreneurs Use Continuous Innovation to Create Radically Successful Businesses", Crown Business, 2024 (Reprint Edition).

T2: Jorge Barba, "Startup Management: A Guide for Entrepreneurs and Managers", Wiley Publication, 2023, 2nd Edition.

Reference Books:

R1: Joe Tidd & John Bessant, "Managing Innovation: Integrating Technological, Market and Organizational Change", Wiley Publication, 2023, 7th Edition.

R2: Steven Fisher, Ja-nae' Duane, The Startup Equation -A Visual Guidebook for Building Your Startup, Indian Edition, Mc Graw Hill Education India Pvt. Ltd, 2016.

Web Links:

1. http://smallbusiness.chron.com/entrepreneurship-business-planning-2532.html
2. **https://www.slideshare.net/Deepika7288/innovation-management-27177578**
3. **https://www.slideshare.net/monirbaalld/innovation-types-and-phases**
4. **https://www.slideshare.net/vladposea/design-thinking-178065774**

COURSE OUTCOMES

CO1:	Develop a start-up Enterprise with Big Idea Generation.	**K3**
CO2:	Interpret feasibility Analysis towards funding issues.	**K2**
CO3:	Analyze start-up capital requirement by analyzing legal factors.	**K4**
CO4:	Assess the basis of innovation management	**K5**
CO5:	Describe the concept of innovation and design thinking for successful business development	**K2**

MAPPING OF COURSE OUTCOMES TO PROGRAM OUTCOMES

	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**
CO1	**1**	**2**		**1**	**1**			**3**
CO2		**2**	**1**			**2**	**2**	
CO3			**3**	**1**		**2**		**1**
CO4	**2**		**2**		**1**		**2**	
CO5	**1**			**3**	**2**	**1**	**1**	

25EMBF41	FOREIGN EXCHANGE MANAGEMENT	3	0	0	3

Course Objective

- Understand the fundamental concepts of foreign exchange and international financial markets.
- Explore the mechanisms and instruments of foreign exchange markets.
- Analyze exchange rate determination, risk, and control strategies.
- Examine the role of regulatory institutions and policy frameworks in foreign exchange management

UNIT I	INTRODUCTION TO FOREIGN EXCHANGE	9 Hours

Meaning and Need for Foreign Exchange-Structure of the Foreign Exchange Market -Participants in the Forex Market-Types of Transactions: Spot, Forward, Futures, Options, and Swaps-Exchange Rate Quotations: Direct and Indirect Methods

UNIT II	EXCHANGE RATE DETERMINATION	9 Hours

Factors Influencing Exchange Rates-Theories of Exchange Rate Determination: -Purchasing Power Parity (PPP), Interest Rate Parity (IRP), Balance of Payments Theory-Determination in Floating and Fixed Exchange Systems -Role of Central Banks in Exchange Rate Management

UNIT III	FOREIGN EXCHANGE RISK MANAGEMENT	9 Hours

Types of Forex Exposure: Transaction, Translation, and Economic Exposure- Measurement and Management of Forex Risk-Hedging Tools: Forward Contracts, Currency Options, Currency Swaps-Internal Risk Management Techniques- Risk Management Policies in Corporates

UNIT IV	REGULATORY FRAMEWORK AND INSTITUTIONS	9 Hours

FEMA (Foreign Exchange Management Act), 1999-Role of RBI and FEDAI in Forex Market-International Monetary Fund (IMF) and World Bank-Current Account Convertibility vs Capital Account Convertibility-ECB (External Commercial Borrowings) Guidelines

UNIT V	APPLICATIONS AND RECENT DEVELOPMENTS	9 Hours

Forex Management in International Trade-Forex Reserves and their Management- Exchange Rate Forecasting Techniques-Currency Derivatives in Practice-Impact of Global Events (Brexit, COVID-19, Wars) on Forex Markets

TOTAL: 45 Hours

Text Books:

Apte, P.G. – International Financial Management – Tata McGraw Hill

Shapiro, Alan C. – Multinational Financial Management – Wiley

Reference Books:

Levi, Maurice D. – International Finance
Eun, Cheol S., and Resnick, Bruce G. – International Financial Management Madura, Jeff – International Financial Management – Cengage

Web Links:

https://www.rbi.org.in

https://www.imf.org

https://www.fedai.org.in

https://www.bis.org

https://www.oanda.com

COURSE OUTCOMES (COs):

CO1:	Explain the structure and functioning of the foreign exchange market.	**K2**
CO2:	Analyze exchange rate movements using various theoretical models.	**K4**
CO3:	Identify and manage different types of foreign exchange risks.	**K3**
CO4:	Understand the legal and regulatory framework governing forex operations in India.	**K2**
CO5:	Apply forex management practices to business and trade scenarios.	**K3**

MAPPING OF COURSE OUTCOMES TO PROGRAM OUTCOMES (POs):

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

25EMBF42	NEO BANKING TECHNOLOGY	3	0	0	3

Course Objectives

- To introduce the concepts and evolution of Neo Banking and FinTech ecosystems.
- To understand the technological foundations enabling Neo Banking services.
- To explore regulatory, security, and compliance aspects in digital banking.
- To analyze business models and strategies adopted by Neo Banks.
- To evaluate the role of Artificial Intelligence, APIs, and blockchain in modern banking solutions.

UNIT I	INTRODUCTION TO NEO BANKING AND FINTECH EVOLUTION	9 Hours

Definition and scope of Neo Banking; emergence and global growth of FinTech - evolution of banking from traditional to digital to Neo Banking - role of technology in transforming financial services - direct-to-consumer versus partnership models - revenue streams including interchange fees, lending, and subscriptions - the future outlook of Neo Banking in India and emerging markets.

UNIT II	TECHNOLOGY ARCHITECTURE OF NEO BANKS	9 Hours

Cloud infrastructure and Platform-as-a-Service (PaaS) - core banking systems versus API-first platforms - mobile-first approach and UI/UX considerations - regulatory compliance including GDPR, RBI norms, and KYC/AML - data privacy, data residency, and encryption standards - digital banking ecosystems and strategic partnerships- the role of blockchain and decentralized finance (DeFi) in Neo Banks - and future-proofing architecture through scalability, flexibility, and modularity

UNIT III	REGULATORY FRAMEWORK AND CYBER SECURITY	9 Hours

Regulatory landscape in India, including RBI guidelines and the regulatory sandbox- Know Your Customer (KYC), Anti-Money Laundering (AML), and digital identity verification - data protection, privacy regulations, and GDPR compliance - cybersecurity protocols in digital banking- the role of RegTech in ensuring compliance- and an overview of the IT Act provisions,

UNIT IV	Customer Engagement and Business Strategy	9 Hours

Customer acquisition and onboarding strategies in Neo Banks - personalization and enhancement of user experience - pricing models and revenue generation methods including premium, subscription, and lending; partnerships with NBFCs, traditional banks, and Fin Techs - key performance indicators (KPIs) and metrics for Neo Banks - and techniques for tracking user engagement, customer lifetime value, churn rate, and overall profitability.

UNIT V	Advanced Technologies in Neo Banking	9 Hours

Open Banking and the API economy - the application of Artificial Intelligence and Machine Learning in credit scoring and fraud detection - the role of Blockchain in digital identity management and smart contracts - Embedded Finance and Banking-as-a-Service (BaaS) models - and emerging trends such as Central Bank Digital Currencies (CBDCs) and conversational banking.

TOTAL : 45 Hours

Text Books:

- **Chris Skinner**, *Digital Bank: Strategies to Launch or Become a Digital Bank*, Marshall Cavendish, 2nd Edition, 2018.
- **Brett King**, *Bank 4.0: Banking Everywhere, Never at a Bank*, Wiley, 2018.
- **Varun Mittal & Lien Choong Luen**, *The Rise of FinTech in China: Redefining Financial Services*, Wiley, 2020.
- RBI Reports & Whitepapers on Digital Banking, Regulatory Sandbox, and FinTech ecosystem (https://www.rbi.org.in).
- **Jesse McWaters**, *The Future of Financial Infrastructure – An Ambitious Look at How Blockchain Can Reshape Financial Services*, World Economic Forum.

Reference Books:

1. *Financial Services Technology 2020 and Beyond* – PwC Reports
2. *RBI Guidelines and Discussion Papers on Digital Banking and NBFCs*
3. World Bank & IMF Reports on FinTech and Financial Inclusion

Web Links:

1. www.rbi.org.in (RBI official publications)
2. www.finextra.com
3. www.fintechweekly.com
4. Reports by McKinsey, PwC, KPMG on FinTech and Neo Banking
5. BIS Papers on Digital Innovation

COURSE OUTCOMES

CO1:	Explain the evolution and scope of Neo Banking in the global and Indian context	**K2**
CO2:	Analyze key components of Neo Bank architecture and compliance technologies	**K4**
CO3:	Analyze cybersecurity frameworks and regulatory measures affecting Neo Banks	**K4**
CO4:	Apply customer-centric business strategies and revenue models for Neo Banks	**K3**
CO5:	Critically assess emerging technologies and trends shaping the Neo Banking sector	**K5**

MAPPING OF COURSE OUTCOMES TO PROGRAM OUTCOMES

	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO 3
CO1	**3**	**1**	**-**	**2**	**2**	**-**	**3**	**2**
CO2	**3**	**1**	**-**	**2**	**2**	**-**	**3**	**2**
CO3	**2**	**2**	**1**	**1**	**3**	**1**	**2**	**3**
CO4	**2**	**-**	**-**	**3**	**1**	**-**	**2**	**1**
CO5	**1**	**3**	**2**	**-**	**2**	**2**	**1**	**2**

25EMBF43	INTERNATIONAL FINANCIAL MANAGEMENT	3	0	0	3

Course Objectives

- Understanding financial management in the international context.
- To know the cross-border transactions, exchange rate risk, international financial markets, and investment decisions across countries.

UNIT I	INTERNATIONAL TRANSACTIONS	9 Hours

Overview and Evolution of International Finance –Institutions for International Finance – Internationalization process –International Monetary and Financial System – Balance of Payments – Exchange rate and money supply – International parity relations – Purchasing power parity – interest rate parity – Forward rate parity

UNIT II	MULTINATIONAL FINANCIAL MANAGEMENT	9 Hours

Process of overseas expansion – Reasons for cross-border investing – The theory of investment – techniques of project evaluation – Approaches for investment under uncertainty – FDI – Measuring and Managing Risk – International M&A – Financial Techniques in M&A – Regulations of M&A in major countries.

UNIT III	INTERNATIONAL MONETARY SYSTEM	9 Hours

Introduction to Institutions of the Foreign Exchange Interbank Market – Foreign Exchange Spot Transactions – forward market — Hedging and Speculation – Hedging FX Transaction Exposure – The Eurocurrency market – international banking – structure and instruments

UNIT IV	BORROWING AND LENDING: INTERNATIONAL SOURCES OF FINANCE	9 Hours

Bond Markets of various countries – Fixed and floating rate notes – Syndicate loans – Syndicated Euro credits – ADR – GDR – Managing interest rate risk – Bond prices – Bond Management – tools and techniques

UNIV V	INTERNATIONAL CAPITAL BUDGETING AND FINANCIAL DECISIONS	9 Hours

International project appraisal techniques -Adjusting for risk and inflation in foreign investments -Cost of capital for foreign investments -Capital structure of multinational firms -International working capital management -Transfer pricing and taxation issues

TOTAL: - 45 Hours

Text Books:

1. Cheol Eun, Bruce Resnick, Tuugi ChuluunInternational Financial Management (10th Edition, 2024)
2. Alan C. Shapiro, Paul Hanouna, Atulya Sarin, Multinational Financial Management (12th Edition, 2024)
3. Tien Van Nguyen, Fundamentals of International Finance (2023)

Reference Books:

- Richard A. Brealey, Stewart C. Myers, Franklin Allen, Alex Edmans, Principles of Corporate Finance (14th Edition, 2022)
- Moorad Choudhry, The Principles of Banking (2nd Edition, 2022)
- Steve Suranovic, International Finance: Theory and Policy
- Keith Pilbeam, International Finance (4th Edition, 2022)

Web Links:

- https://www.mheducation.com/highered/product/International-Financial-Management-Eun.html en.wikipedia.org+15mheducation.com+15abebooks.com+15
- https://info.mheducation.com/rs/128-SJW-347/images/Preface_Eun_International_Financial_Mgmt_10e.pdf info.mheducation.com+1ebay.com+1
- https://mercyhighschool.ecampus.com/international-financial-management-cheol/bk/9781266224058 mercyhighschool.ecampus.com

COURSE OUTCOMES

CO1:	Interpret evolution, process and system of International Finance	**K 2**
CO2:	Examine the concepts of international merger and acquisitions, financial techniques and regulations	**K 4**
CO3:	Determine international monetary system	**K 5**
CO4:	Explain ADR, GDR and bond management	**K 5**
CO5:	Infer international capital budgeting	**K 4**

MAPPING OF COURSE OUTCOMES TO PROGRAM OUTCOMES

	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3
CO1	**3**	**2**	**-**	**1**	**-**	**1**	**3**	**-**
CO2	**3**	**1**	**3**	**1**	**-**	**-**	**-**	**1**
CO3	**2**	**1**	**-**	**-**	**3**	**-**	**-**	**-**
CO4	**2**	**-**	**2**	**-**	**3**	**1**	**-**	**3**
CO5	**3**	**-**	**3**	**3**	**2**	**-**	**2**	**-**

25EMBF44	FINTECH IN WEALTH MANAGEMENT	3	0	0	3

Course Objectives:

- To understand the impact of FinTech innovations on wealth management practices.
- To explore digital platforms, robo-advisory, and algorithm-based portfolio construction.
- To examine regulatory, cybersecurity, and ethical implications in FinTech-based wealth services.
- To provide exposure to practical tools and future trends in digital wealth management.

UNIT-I	FOUNDATIONS OF FINTECH IN WEALTH MANAGEMENT	9 Hours

Introduction to FinTech and Evolution of Wealth Management - Traditional vs Digital Wealth Management Models - Client Profiling, Risk Appetite & Behavioral Finance - Digital Demat, KYC & Onboarding in Wealth Platforms - Overview of Indian and Global FinTech Ecosystem.

UNIT-II	ROBO-ADVISORS AND ALGORITHMIC ADVISORY	9 Hours

Robo-Advisory Platforms: Architecture and Components - Portfolio Construction, Asset Allocation & Rebalancing Algorithms - AI/ML in Personalized Investment Planning - Comparison: Human vs Robo vs Hybrid Advisory Models - Case Studies: Wealth front, Betterment, Zerodha's Coin, Scrip box.

UNIT-III	ADVANCED TECHNOLOGIES IN WEALTH MANAGEMENT	9 Hours

Use of Big Data and Predictive Analytics in Investment Decisions - Blockchain for Asset Management: Custody, Tokenization & Smart Contracts - Cryptocurrencies and Digital Assets in Portfolios - Wealth Tech APIs and Integration with Banking-as-a-Service (BaaS) - Cloud Computing and Open Architecture in FinTech Platforms.

UNIT-IV	REGULATORY, RISK AND ETHICAL ASPECTS	9 Hours

SEBI and RBI Guidelines on Investment Advisory and FinTech - Data Privacy, Security Protocols & Cyber Risk Management - Ethical Issues in Algorithmic Bias and Client Suitability - AML, KYC & Compliance in Wealth Tech - Cross-border Regulations and Global Best Practices.

UNIT-V	FUTURE OF WEALTH MANAGEMENT AND CASE APPLICATIONS	9 Hours

Embedded Finance and Embedded Wealth Models - Conversational AI, Voice-based Wealth Assistants (e.g., Alexa, Chatbots) - ESG Investing and Sustainable Wealth Portfolios -Tokenized Real Estate, Art, and Impact Investments - Future Trends: CBDCs, Super Apps, Generative AI in Investment Advice.

Textbooks:

1. **Paul Schulte & Leonard Shek** – *The Next Revolution in our Credit-Driven Economy: The Advent of FinTech* (Publisher: Palgrave Macmillan)
2. **Susanne Chishti & Janos Barberis** – *The FINTECH Book: The Financial Technology Handbook for Investors, Entrepreneurs and Visionaries*
   (Publisher: Wiley)
3. **Sanjib Das** – *FinTech: Changing the Face of Financial Services*
   (Publisher: SAGE Publications India)

Reference Books:

1. **Chris Skinner** – *Digital Bank: Strategies to Launch or Become a Digital Bank*
2. **CFA Institute Investment Foundations** – *FinTech in Investment Management*
3. **Mark van Rijmenam** – *The Organisation of Tomorrow: How AI, Blockchain and Analytics Turn Your Business into a Data Organisation*

Weblink:

1. **CFA Institute** – https://www.cfainstitute.org
2. **World Economic Forum – FinTech Reports**
   https://www.weforum.org
3. **NASSCOM FinTech Reports**
   https://nasscom.in/knowledge-center/publications

COURSE OUTCOMES

CO1:	To gain foundational knowledge of how technology is reshaping the wealth management value chain.	**K 2**
CO2:	Analyze the role of automation in advisory services and develop understanding of algorithm-driven wealth models.	**K 4**
CO3:	Understand how cutting-edge technologies are driving innovation in digital wealth services.	**K 5**
CO4:	Evaluate regulatory frameworks, ethical dilemmas, and risk safeguards in the FinTech wealth domain.	**K 5**
CO5:	Explore futuristic and emerging trends, along with real-world applications and future career roles in digital wealth.	**K 4**

MAPPING OF COURSE OUTCOMES TO PROGRAM OUTCOMES

	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3
CO1	3	2	-	1	-	1	3	-
CO2	3	1	3	1	-	-	-	1
CO3	2	1	-	-	3	-	-	-
CO4		-	2	-	3	1	-	3
CO5		-	3	3	2	-	2	-

25EMBF45	FRAUD ANALYTICS, RISK AND REGTECH	3	0	0	3

Course Objectives

- To provide foundational knowledge of financial fraud types, risk categories, and regulatory responses.
- To equip learners with analytical tools and techniques for detecting, preventing, and mitigating financial fraud.
- To develop understanding of Reg Tech applications, governance standards, and ethical
- frameworks in managing compliance and risk in the digital financial ecosystem.

UNIT-I	INTRODUCTION TO FINANCIAL FRAUD AND RISK LANDSCAPE	9 Hours

Definition and Types of Financial Fraud – Historical Trends in Financial Crimes – Common Fraud Schemes in Banking and Fintech – Identity Theft and Synthetic ID Fraud – Insider Fraud and Occupational Fraud – Social Engineering and Phishing Attacks – Fraud Triangle Theory and Red Flags – Regulatory Definitions of Fraud (RBI, FATF, etc.) – Impacts of Fraud on Financial Institutions – Fraud Typologies in Credit, Insurance, and Investment – Fraud Risk Assessment Process – Ethics and Fraud Prevention Culture

UNIT-II	TOOLS AND TECHNIQUES IN FRAUD ANALYTICS	9 Hours

Introduction to Fraud Analytics – Data Sources for Fraud Detection – Descriptive, Predictive, and Prescriptive Analytics – Supervised vs Unsupervised Learning for Fraud – Anomaly Detection Techniques – Link Analysis and Network Analytics – Use of Decision Trees, Neural Networks, and Clustering – Data Visualization in Fraud Analytics – Real-time Transaction Monitoring – Pattern Recognition and Behavioral Modeling – Use of Python/R in Fraud Analytics – Case Studies on Fraud Analytics in banking

UNIT-II	RISK MANAGEMENT FRAMEWORKS IN FINANCIAL SERVICES	9 Hours

Types of Risk: Credit, Market, Operational, Compliance, Cyber – Basel Norms and Risk-weighted Assets – Risk Identification, Assessment, and Control – Risk Appetite and Tolerance Levels – Risk Reporting and Governance Structures – Stress Testing and Scenario Analysis – Internal Control Systems and SOX Compliance – Three Lines of Defense Model – Role of CRO and Risk Committees – Integration of Risk and Fraud Management – Early Warning Systems (EWS) – Risk Adjusted Performance Metrics (RAPM)

UNIT-IV	REGULATORY TECHNOLOGY (REGTECH) APPLICATIONS AND ECOSYSTEM	9 Hours

Drivers of Reg Tech Adoption – Regulatory Reporting Automation – Digital KYC and e-KYC – AML and CFT Monitoring Tools – Automated Risk Assessment Tools – AI and NLP in Regulatory Intelligence – Smart Contracts and Regulatory Compliance – Blockchain for Audit Trails and Transparency – Reg Tech in Insurance and Capital Markets – Regulatory Sandboxes and Innovation Hubs – Challenges in Reg Tech Implementation		
UNIT-V	**GOVERNANCE, ETHICS, AND EMERGING RISKS IN THE DIGITAL ERA**	**9 Hours**
Data Privacy Laws (GDPR, DPDP Act, etc.) – Ethical Use of AI in Fraud Detection – Bias and Discrimination in Risk Models – Governance Standards in Risk and Compliance – Cybersecurity Governance and Ethical Hacking – Ethics in Algorithmic Credit Scoring – Responsible Disclosure and Whistleblowing – Fraud in Crypto and Digital Assets – Deepfakes, Synthetic Fraud, and Emerging Tech Threats – Cross-border Regulatory Coordination – ESG Risk and Regulatory Compliance – Future Trends in Risk and Reg Tech. **Total Hours - 45 Hours**		

Text Books

1. **Kirkos, E.** *Fraud Analytics Using Descriptive, Predictive, and Social Network Techniques: A Guide to Data Science for Fraud Detection* Publisher: Wiley, 2015
ISBN: 9781118892701
2. **Witten, I. H., Frank, E., Hall, M. A., & Pal, C. J.** *Data Mining: Practical Machine Learning Tools and Techniques* (4th Edition) Publisher: Morgan Kaufmann, 2016 ISBN: 9780128042913

Reference Books

1. **Arner, D. W., Buckley, R. P., Zetzsche, D. A., & Barberis, J. N.** *FinTech, RegTech and the Reconceptualization of Financial Regulation* Publisher: Springer, 2019 ISBN: 9783030151173
2. **Cybulski, J. L.** *Cyber Fraud: Tactics, Techniques and Procedures* Publisher: CRC Press, 2022 ISBN: 9780367754515

Web Links

https://www.sebi.gov.in
https://www.rbi.org.in
https://www.investopedia.com
https://www.mckinsey.comhttps://www.pwc.com

COURSE OUTCOMES

CO1	Understand various types of financial fraud, their causes, patterns, and impact on financial institutions and consumers.	**K 2**
CO2	Apply data analytics techniques and tools to detect, predict, and prevent fraud in digital financial systems.	**K 4**
CO3	Analyze enterprise risk categories and frameworks used for identifying, assessing, and mitigating risks in financial services.	**K 5**
CO4	Evaluate the role of RegTech in automating compliance, enhancing regulatory oversight, and reducing operational risks.	**K 5**
CO5	Assess ethical dilemmas, data privacy concerns, and governance strategies to handle emerging risks in fraud and compliance management.	**K 4**

MAPPING OF COURSE OUTCOMES TO PROGRAM OUTCOMES

	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**
CO1	**3**	**1**	**1**	**3**	**-**	**2**	**3**	**0**
CO2	**2**	**2**	**-**	**2**	**2**	**1**	**2**	**1**
CO3	**3**	**-**	**1**	**2**	**1**	**2**	**3**	**2**
CO4	**3**	**2**	**1**	**3**	**-**	**2**	**3**	**2**
CO5	**3**	**3**	**1**	**3**	**3**	**2**	**3**	**-**

25EMBF46	FINTECH: INNOVATION AND TRANSFORMATION IN FINANCIAL SERVICES	3	0	0	3

Course Objectives

- Understanding financial management in the international context.
- To know the cross-border transactions, exchange rate risk, international financial markets, and investment decisions across countries.

UNIT I	INTRODUCTION TO FINTECH	9 Hours

Introduction to Fintech – how it is transforming financial services - Global trends and recent developments - Reviewing the Fintech sector and its future growth prospects - India FinTech Insights - Fintech Adoption and Economic Forces - Challenger banks and neo banks - Fintech and Financial Inclusion - Fintech and Remittances

UNIT II	BLOCKCHAIN AND CRYPTOCURRENCIES IN FINTECH	9 Hours

Block chain Technology: What it is, how it works, advantages and limitations – Block chain technology and its applications in financial services – Crypto currencies: Bitcoin, Ethereum, XRP – risk and return opportunities – Stable coins: Definition, opportunities and risks - Retail Central Bank Digital Currency (CBDC)

UNIT III	DATA, AI & ML IN FINTECH	9 Hours

Data Issues: Big data, data collection, social media, misuse of data - Artificial Intelligence (AI), Machine Learning (ML), Deep Learning - Natural Language Processing (NLP) - AI in Financial Services: NLP, Chatbots, Voice Assistants - Implications of Robotics and Automation on Employment

UNIT IV	FINTECH APPLICATIONS IN FINANCIAL SERVICES	9 Hours

Digital Payment Systems: Concepts, working, trends, opportunities, and challenges - Credit Lending: Types, supply & demand factors, fintech and big tech trends - Digitization of Trading: Processes, opportunities, and challenges - Trends in Insur Tech and its impact on the insurance value chain - Case Discussion: Lemonade – Insurtech & Behavioral Economics

UNIV V	REGULATION AND EMERGING TECHNOLOGIES IN FINTECH	9 Hours

Market Developments in RegTech and Sup Tech - Impact of AI on Financial Services - AI Applications in Financial Services - Case Studies and Examples of Emerging Trends

TOTAL: - 45 Hours

Text Books:

1. **Arner, D. W., Buckley, R. P., & Zetzsche, D. A. (2023),** *FinTech: Finance, Technology and Regulation,* Cambridge University Press
2. **Chishti, S., & Barberis, J. (2022),** *The FinTech Book: The Financial Technology Handbook for Investors, Entrepreneurs and Visionaries,* Wiley
3. **Natarajan, H., Krause, S., & Gradstein, H. (2022),** *The Future of Finance: The Impact of FinTech, AI, and Crypto on Financial Services,* World Bank Group

Reference Books:

1. **Puschmann, T. (2021)**, *FinTech: Business Models and Technology Driving Financial Services Innovation,* Springer.
2. **Gomber, P., & Hackethal, A. (2023),** *Research Handbook on FinTech and Artificial Intelligence in Finance,* Edward Elgar Publishing

Web Links:

https://www.weforum.org/projects/shaping-the-future-of-financial-and-monetary-systems
https://rbi.org.in/scripts/BS_SpeechesView.aspx?Id=1315
https://home.kpmg/xx/en/home/insights/2024/01/pulse-of-fintech-h2-2023.html
https://www.ey.com/en_gl/ey-global-fintech-adoption-index
https://www.oecd.org/finance/financial-markets/regulatory-innovation.htm

COURSE OUTCOMES

CO1:	Define the global and Indian Fin Tech landscape and evaluate the transformation of financial services	**K1**
CO2:	Discuss the block chain technology and crypto currency ecosystems and implications for modern financial services.	**K6**
CO3:	Apply the role of big data, artificial intelligence, machine learning, and natural language processing	**K3**
CO4:	Evaluate the trends, opportunities, and challenges in the application of FinTech	**K4**
CO5:	Examine the regulatory and supervisory technological frameworks.	**K4**

MAPPING OF COURSE OUTCOMES TO PROGRAM OUTCOMES

	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO 3
CO1	**3**	**1**	**-**	**2**	**2**	**-**	**3**	**2**
CO2	**3**	**1**	**-**	**2**	**2**	**-**	**3**	**2**
CO3	**2**	**2**	**1**	**1**	**3**	**1**	**2**	**3**
CO4	**2**	**-**	**-**	**3**	**1**	**-**	**2**	**1**
CO5	**1**	**3**	**2**	**-**	**2**	**2**	**1**	**2**

25EMBF47	FINANCIAL MARKETS AND BANKING OPERATIONS	3	0	0	3

Course Objectives

- To provide basic knowledge about the structure, organization and working of financial system
- To provide emerging financial trends and banking operations

UNIT I	INTRODUCTION TO FINANCIAL MARKETS	9 Hours

Financial System: Meaning and components of financial system: Financial markets, Financial assets and Financial intermediaries - Financial System in India – Structure and Components - Role of Financial Markets in Economic Development - Primary vs. Secondary Markets

UNIT II	MONEY MARKET AND CAPITAL MARKET	9 Hours

Features and Functions of the Money Market - Instruments: Treasury Bills, Commercial Papers, Certificates of Deposit, Call Money - Capital Market – Features and Structure - Instruments: Equity Shares, Debentures, Bonds, Preference Shares - Recent Developments in Indian Money and Capital Markets

UNIT III	BANKING OPERATIONS AND SERVICES	9 Hours

Introduction to Banking – Types of Banks and Functions - Role of Commercial Banks in Financial Markets - Retail Banking Products: Deposits, Loans, Cards - Electronic Banking: NEFT, RTGS, IMPS, UPI, Internet and Mobile Banking - KYC Norms and Anti-Money Laundering Measures

UNIT IV	CENTRAL BANKING AND MONETARY POLICY	9 Hours

Role and Functions of RBI - Monetary Policy – Objectives and Instruments -Credit Control Measures - Development and Promotional Role of RBI - RBI's Role in Regulating Commercial Banks and NBFCs

UNIV V	EMERGING TRENDS AND REFORMS IN FINANCIAL AND BANKING SECTOR	9 Hours

Financial Inclusion and Digital Banking - Microfinance and Self-Help Groups (SHGs) - FinTech and Blockchain in Banking -Non-Banking Financial Companies (NBFCs) – Recent Reforms in the Financial Sector - Global Financial Markets – Impact on Indian Financial System

TOTAL: - 45 Hours

Text Books:

4. Bhole, L.M. & Mahakud, J. *Financial Institutions and Markets: Structure, Growth & Innovations ,* McGraw Hill Education, 7th Edition, 2023

5. Khan*, M.Y. Indian Financial System ,* McGraw Hill Education, 11th Edition, 2024

6. Gurusamy, S. *Financial Services and System,* Tata McGraw Hill, 6th Edition, 2022

7. K.C. Shekhar & Lekshmy Shekhar *, Banking Theory, Law and Practice,* Vikas Publishing House, Edition (2023)

Reference Books:

- Machiraju, H.R. *Indian Financial System,* Vikas Publishing, Latest Edition: 2023
- Varshney, P.N. & Mittal, D.K. *Indian Financial System,* Sultan Chand & Sons, Edition: 2022
- Desai, Vasant *The Indian Financial System and Development,* Himalaya Publishing House Edition: 2023
- R.K. Uppal , *Modern Banking,* New Century Publications, Revised Edition (2022)

Web Links:

1. https://www.rbi.org.in
2. https://www.rbi.org.in/Scripts/FAQView.aspx?Id=60
3. https://www.npci.org.in/what-we-do/upi/product-overview

COURSE OUTCOMES

CO1:	Understand the structure and components of the financial system.	**K 2**
CO2:	Examine Indian money and capital markets and evaluate the characteristics of their instruments.	**K 4**
CO3:	Determine the functions of banks and apply knowledge of banking services and digital transactions.	**K 5**
CO4:	Explain financial and banking system through monetary policies.	**K 5**
CO5:	Infer emerging trends, digital innovations, and institutional reforms shaping the future of the financial and banking sectors.	**K 4**

MAPPING OF COURSE OUTCOMES TO PROGRAM OUTCOMES

	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**
CO1	**3**	**2**	**-**	**1**	**-**	**1**	**3**	**-**
CO2	**3**	**1**	**3**	**1**	**-**	**-**	**-**	**1**
CO3	**2**	**1**	**-**	**-**	**3**	**-**	**-**	**-**
CO4	**2**	**-**	**2**	**-**	**3**	**1**	**-**	**3**
CO5	**3**	**-**	**3**	**3**	**2**	**-**	**2**	**-**

25PMBF31	PRACTICAL - DATA ANALYSIS FOR BUSINESS DECISIONS	0	0	2	1

Course Objectives

- To understand the fundamentals and basic functions of EXCEL
- To create models and perform data analysis in EXCEL.

UNIT I	BASICS RELATED TO EXCEL	6 Hours

Saving closing and opening files, working with multiple sheets, fixing of cells, freezing of cells, alignment, wrap text, merge and center, protect sheet, protect workbook, insert text box, insert header and footer, hyperlink, selecting cells in dataset using shortcut keys, name the range, time and date functions, split window, data linkage

UNIT II	BASIC TECHNIQUES	6 Hours

Formatting and other options with paste special function, rounding function, importing data from text file and internet, remove duplicate values, subtotal, data consolidation Text function : left, right, mid, trim, Len, find, search, rept, concatenate, replace, upper, lower, proper, substitute

UNIT III	DATA HANDLING IN EXCEL	6 Hours

Sorting data, filtering data, parsing data, data validations, group, ungroup, advanced filters - Basic functions of excel : if, sum, count, count if, count a, sum if, average, sum product - Creating and formatting PIVOT tables - Recording MACROs

UNIT IV	CONDITIONAL FORMATTING IN EXCEL AND MODEL BUILDING	6 Hours

Highlight cell rules, data bars, color scales and icon sets, clear rule, manage rule, new rule Charts and graphs using excel : xy scatter plot, column and bar chart, pie charts, adding legends and titles - Model building in excel : model building through the applications of various functions and tools of Microsoft excel What-if analysis : application of goal seek, application using data table, Scenario Manager

UNIT V	DATA ANALYSIS AND DATA VISUALIZATION	6 Hours

Installing data analysis tool pack, descriptive statistics, manual computation of all output of descriptive statistics - Create dashboards in EXCEL

TOTAL: 30 Hours

Text Books:

1. Alan Murray, Advanced Excel Formulas: Unleashing Brilliance with Excel Formulas, 2022, Apress

Lokesh Lalwani, Excel 2019 All-In-One: Master the new features of Excel 2019 / Office 365, 2019,

bpb publications

Reference Books

1. Ritu Arora, Mastering Advanced Excel, 2023, bpb publications.
2. Adam Ramirez, Excel Formulas and Functions: Step-By-Step Guide with Examples, 2021, Repro books

Web Links:

1. https://onlinecourses.nptel.ac.in/noc22_mg35/preview
2. https://onlinecourses.nptel.ac.in/noc21_ge21/preview

COURSE OUTCOMES

CO1	Analyze the basic functions of EXCEL	**K4**
CO2	Demonstrate the good understanding of spreadsheet design	**K2**
CO3	Apply the functions of filtering and macros in spreadsheet	**K3**
CO4	Apply the robust and dynamic models based on inputs	**K3**
CO5	Analyze and visualize the data for decision making	**K4**

25IMBF31	PRACTICAL - INTERNSHIP	0	0	8	4

COURSE OBJECTIVE:

- The internship module aims to provide the student with:
- A practice-oriented and 'hands-on' working experience in the real world or industry, and to enhance the student's learning experience.
- An opportunity to develop a right work attitude, self-confidence, interpersonal skills and ability to work as a team in a real organizational setting.
- An opportunity to further develop and enhance operational, customer service and other life-long knowledge and skills in a real-world work environment.
- Pre-employment training opportunities and an opportunity for the company or organization to assess the performance of the student and to offer the student an employment opportunity after his/her graduation if it deems fit.

COURSE OUTCOMES

CO1:	Understanding the application of knowledge and skill sets acquired from the course and workplace in the assigned job function/s.	**K2**
CO2:	Applying real life challenges in the workplace by analyzing work environment and conditions and selecting appropriate skill sets acquired from the course	**K3**
CO3:	Create critical thinking and problem-solving skills by analyzing underlying issue/s to challenges	**K6**
CO4:	Understanding the ability to harness resources by analyzing challenges and considering opportunities.	**K2**
CO5:	Understanding appreciation and respect for diverse groups of professionals by engaging harmoniously with different company stakeholders	**K2**

MAPPING OF COURSE OUTCOMES TO PROGRAM OUTCOMES

	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3
CO1	1	-	-	3	1	-	2	1
CO2	3	1	-	2	2	-	3	2
CO3	-	2	3	-	1	3	-	1
CO4	1	-	-	3	1	-	2	1
CO5	1	-	-	3	1	-	2	1

SEMESTER IV

25CMBF41	ENTREPRENEURSHIP IN FINTECH	4	0	0	4

Course Objectives

- Introduce students to fintech technologies and entrepreneurial opportunities.
- Develop skills to design innovative fintech business models.
- Understand regulatory, ethical, and operational challenges in fintech entrepreneursh

UNIT I	INTRODUCTION TO FINTECH	12 Hours

Meaning of FinTech Industry- Evolution of FinTech, Infrastructure, Banking industry, Startups and Emerging Markets -Importance of FinTech, Global FinTech Investment, Main FinTech Hubs FinTech in Payment Industry-Multichannel digital wallets applications supporting wallets, onboarding and KYC application-FinTech in Lending Industry Payment and Settlements System Act 2007-Master direction on Issuance and operation of prepaid payments instruments

UNIT II	FINTECH REGULATION AND REGTECH	12 Hours

FinTech Regulation, Evolution of Reg Tech- Reg Tech ecosystem Financial institutions, startups, and regulators-The future of Reg tech and the technologies impacting, Entrepreneurial opportunities in the fintech space Formal lending, Informal lending, P2P lending-POS lending, Online lending, Payday lending, Microfinance, Crowd funding-Regulation of mobile money, Regulation of smart contracts, Regulation of Robo-Advisory services, legal and regulatory implications of cryptocurrencies.

UNIT III	INTRODUCTION TO ENTREPRENEURSHIP	12 Hours

Entrepreneurial mindset and innovation- Business models in Fintech startups- Funding sources: Venture capital, crowdfunding, and angel investors- Legal aspects of starting a Fintech business- Market research and opportunity analysis- Competitive landscape in Fintech- Product development and MVP (Minimum Viable Product)- Scaling strategies for Fintech startups

UNIT IV	FINTECH REGULATION AND REGTECH	12 Hours

FinTech Regulation, Evolution of Reg Tech- Reg Tech ecosystem Financial institutions, startups, and regulators. The future of Reg tech and the technologies impacting, Entrepreneurial opportunities in the fintech space Formal Lending-Informal lending, P2P lending, POS lending, Online lending, Payday lending, Microfinance, Crowd funding. Regulation of mobile money-Regulation of smart contracts, legal and regulatory implications of crypto currencies

UNIT V	FUNDING, SCALING, AND PITCHING FINTECH	12 Hours

Sources of Startup Funding: Angel Investors-VCs, Crowd funding- Elements of a Successful Fintech Pitch Deck- Revenue models in Fintech- Managing operational costs and profitability-

Sustainable business practices in Fintech- Analysis of successful Fintech funding rounds- Case Studies
TOTAL: -- 60 Hours

TEXT BOOK:

1) Authors: Susanne Chishti and Janos Barberis

2) Essential introduction to the fintech ecosystem, startup strategies, and innovation models

3) Digital Bank: Strategies to Launch or Become a Digital Bank

REFERENCE BOOKS:

1) The Basics of Bitcoins and Blockchains: An Introduction to Cryptocurrencies and the Technology that Powers Them Author: Antony Lewis

2) The Business Blockchain: Promise, Practice, and Application of the Next Internet Technology Author: William Mougayar

3) Payments Systems in the U.S.: A Guide for the Payments Professional Authors: Carol Coye Benson and Scott L

WEB LINKS:

https://www.fsb.org/work-of-the-fsb/financial-innovation-and-structural-change/fintech/

https://www.rbi.org.in/Scripts/BS_SpeechesView.aspx?Id=1116

https://www2.deloitte.com/us/en/pages/financial-services/topics/fintech.html

COURSE OUTCOMES

CO1:	Understanding the application of knowledge and skill sets acquired from the course and workplace in the assigned job function/s.	**K2**
CO2:	Applying real life challenges in the workplace by analyzing work environment and conditions and selecting appropriate skill sets acquired from the course	**K3**
CO3:	Create critical thinking and problem-solving skills by analyzing underlying issue/s to challenges	**K6**
CO4:	Understanding the ability to harness resources by analyzing challenges and considering opportunities.	**K2**
CO5:	Understanding appreciation and respect for diverse groups of professionals by engaging harmoniously with different company stakeholders	**K2**

MAPPING OF COURSE OUTCOMES TO PROGRAM OUTCOMES

	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**
CO1	1	-	-	3	1	-	2	1
CO2	3	1	-	2	2	-	3	2
CO3	-	2	3	-	1	3	-	1
CO4	1	-	-	3	1	-	2	1
CO5	1	-	-	3	1	-	2	1

25CMBF42	CORPORATE SUSTAINABILITY	3	0	0	3

Course Objectives

- To Outline the concept of Corporate Social Responsibility and Sustainability
- To Examine the provisions of International Guidelines on CSR and CSR Mandate in India
- To explain the Stakeholder approach towards CSR and role of NGOs, Foundations and Government in CSR

UNIT I	INTRODUCTION	9 Hours

Introduction– Meaning & Definitions of CSR- History & evolution of CSR. The principles of CSR- The prominence of CSR- Changing emphasis in companies – Environmental issues and their effects & implications. Concept of Charity, Corporate philanthropy, Corporate Citizenship, CSR through triple bottom line and Sustainable Business; relation between CSR and corporate governance; environmental aspect of CSR - Chronological evolution of CSR in India – Drivers of CSR- Carroll's model - CSR Initiatives in India.

UNIT II	INTERNATIONAL FRAMEWORK FOR CSR	9 Hours

International framework for corporate social Responsibility, Millennium Development goals, Sustainable development goals, Relationship between CSR and MDGs. United Nations (UN) Global Compact 2011. UN guiding principles on business and human rights. OECD CSR policy tool, ILO tri- partite declaration of principles on multinational enterprises and social policy. CSR in developing nations.

UNIT III	CSR LEGISLATIONS IN INDIA	9 Hours

CSR-Legislation in India. Section 135 of Companies Act 2013.Scope for CSR Activities under Schedule VII, Appointment of Independent Directors on the Board, and Computation of Net Profit's Implementing Process in India.

UNIT IV	GLOBALISATION, SUSTAINABILITY AND CSR	9 Hours

How globalization affects CSR – Globalization, Corporate Failures & CSR. Globalization a threat or opportunity for CSR- Defining sustainability- Introduction to sustainability- Humanity & the Environment –The IPAT equation- Human Consumption Patterns and the Rebound effect – Challenges of Sustainability -The Brundtland Report – Redefining sustainability – Distributable Sustainability-

UNIT V	STAKEHOLDERS OF CSR	9 Hours

Identifying key stakeholders of CSR & their roles. Role of Public Sector in Corporate, government programs that encourage voluntary responsible action of corporations. Role of Non-profit &Local Self Governance in implementing CSR; Contemporary issues in CSR & MDGs. Global Compact Self-Assessment Tool, National Voluntary Guidelines by Govt. of India. Understanding roles and responsibilities of corporate foundations- Case Studies on CSR
TOTAL : - 45 Hours

Text Books:

1. Mark S. Schwartz, Corporate Social Responsibility: An Ethical Approach Broadview Press, 2011
2. David Crowther & Guler Aras, Corporate Social Responsibility: Part I - Principles, Stakeholders & Sustainability, Ventus Publishing ApS, 2010.

Reference Books:

1. M. A. Quaddus, Muhammed Abu B. Siddique, Handbook of Corporate Sustainability: Frameworks, Strategies and Tools , Edward Elgar Publishing, 1st Edition, 2011
2. Srinivasa, Growth, Sustainability, and India's Economic Reforms, Oxford publication, 2011.
3. Mallin, Christine A., Corporate Governance (Indian Edition), Oxford UniversityPress, New Delhi, 4th Edition, 2012.
4. Blowfield, Michael, and Alan Murray, Corporate Responsibility, Oxford University Press,2014
5. Sharma, J.P., Corporate Governance, Business Ethics & CSR, Ane Books Pvt Ltd,New Delhi, 2nd Edition,2019

Web Links:

1. https://www.mdos.si/wp-content/uploads/2018/04/defining-corporate-social-responsibility.pdf
2. https://www.ukessays.com/lectures/business/business-management/csr

COURSE OUTCOMES

CO1:	Appraise the Evolution of CSR and Explain the theoretical base of CSR comprising of economic, legal, ethical and philanthropic features of CSR	**K5**
CO2:	Analyze the International Guidelines on CSR and compare the provisions of the various guidelines	**K4**
CO3:	Identify the provisions of Section 135 of Indian Companies Act related to CSR and apply it to the CSR activities of companies	**K3**
CO4:	Infer the impact of Globalization on CSR and Explain Sustainability and its Challenges	**K2**
CO5:	Compile the Stakeholders of CSR and Public Sector, Corporate Foundations	**K4**

MAPPING OF COURSE OUTCOMES TO PROGRAM OUTCOMES

	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**
CO1	**3**	**-**	**3**	**3**	**-**	**-**	**-**	**3**
CO2	**1**	**-**	**-**	**3**	**2**	**-**	**3**	**1**
CO3	**-**	**-**	**1**	**3**	**-**	**-**	**1**	**-**
CO4	**1**	**-**	**-**	**-**	**2**	**-**	**1**	**1**
CO5	**-**	**-**	**2**	**2**	**-**	**-**	**2**	**1**

25RMBF41	PROJECT	0	0	20	10

Course Objectives

- The Aim of the final year project is to develop student's knowledge for solving societal problem.
- It enables students to develop problem solving, analysis, synthesis and evaluationskills.

COURSE OUTCOMES

CO1:	Create and develop deep understanding of the interaction.	**K6**
CO2:	Analyze and solve problems on an executive level and demonstratingcritical.	**K4**
CO3:	Design the general (core) management skills in the chosen area of specialization.	**K6**
CO4:	Design strategies to solve business problems and pursue opportunities.	**K6**
CO5:	Interpret a variety of ways to engage in experiential learning.	**K5**

MAPPING OF COURSE OUTCOMES TO PROGRAM OUTCOMES

	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3
CO1	**1**	**-**	**3**	**-**	**2**	**1**	**1**	**3**
CO2	**2**	**2**	**1**	**1**	**3**	**1**	**2**	**3**
CO3	**1**	**-**	**3**	**-**	**2**	**1**	**1**	**3**
CO4	**1**	**-**	**3**	**-**	**2**	**1**	**1**	**3**
CO5	**1**	**3**	**2**	**-**	**2**	**2**	**1**	**2**