

SYLLABUS



DEPARTMENT OF MANAGEMENT
FACULTY OF MANAGEMENT

**MASTER OF BUSINESS ADMINISTRATION
(FINTECH)**

Two Years Regular Full-Time Four Semester Course

2026-2028



JAINARAIN VYAS UNIVERSITY JODHPUR

(Accredited B++ by NAAC)

NOTIFICATION

In compliance of decision of the Hon'ble High Court all students are required to fulfill 75% attendance rule in each subject and there must be 75% attendance of the student before he/she could be permitted to appear in the examination.

REGISTRAR
(Academic)

DEPARTMENT OF MANAGEMENT
FACULTY OF MANAGEMENT

LIST OF TEACHERS

- | | | |
|----|---|-------------------------------|
| 1. | Prof. Shishu Pal Singh Bhadu
M.Com. (Bus.Adm.), Ph.D., | Dean & Professor |
| 2. | Dr. Puja Gehlot
M.T.A., MBA, Ph.D., FDP(IIM-A) | Head &
Assistant Professor |
| 3. | Dr. Neelam Kalla
M.B.A.,UGC-NET,Ph.D,FDP(IIM-A) | Assistant Professor |
| 4. | Dr. Nishant Gehlot
M.B.A., M.B.L., Ph.D | Assistant Professor |

MASTERS OF BUSINESS ADMINISTRATION (FINTECH)

The **Department of Management**, under the **Faculty of Management** at Jai Narain Vyas University, Jodhpur (Rajasthan), is a distinguished institute for management education and research. Established in **1968**, the department has consistently served as a dynamic platform for imparting high-quality management education under a State University system. As a co-educational institute offering postgraduate and research programmes in management, Department of Management has earned recognition as a **preferred destination for pragmatic and industry-oriented learning**.

Over the decades, the department has nurtured generations of management professionals who have contributed significantly across diverse sectors. Graduates from Department of Management form part of an exceptionally broad array of organizations, ranging from **entrepreneurial ventures and established corporations to government and non-profit institutions** in India and across the globe. The department takes pride in having produced leaders who hold **top positions in the corporate sector**, as well as **successful entrepreneurs, thought leaders, policymakers, and distinguished academicians**.

The **MBA programme** was originally initiated under the guidance of the **Department of Commerce** by **Late Prof. D. N. Elhance**, making it one of the **earliest MBA programmes in India**, conceptualized on the lines of premier management institutions such as Indian Institutes of Management. Since its inception, the department has remained a pioneer in the field of management education and has consistently upheld its reputation as **“An Enterprise of Paramount Excellence.”**

Building upon this rich legacy, the **MBA (Fintech)** programme has been introduced to address the rapidly evolving intersection of **finance, technology, and digital innovation**. The programme is designed to equip students with cutting-edge knowledge in areas such as **digital payments, blockchain technologies, algorithmic trading, financial analytics, regulatory technology, and cybersecurity in finance**.

The **MBA (Fintech)** programme aims to develop future-ready professionals capable of leading transformation in the financial services industry. Through a blend of **academic rigor, technological orientation, and industry relevance**, the programme prepares students to contribute effectively to **banks, fintech startups, financial institutions, consulting firms, and global technology companies** shaping the digital financial ecosystem.

With its strong academic foundation, experienced faculty, and commitment to excellence, the **Department of Management at Jai Narain Vyas University** continues to uphold its legacy while embracing innovation through the **MBA (Fintech) programme**, preparing the next generation of leaders for the **digital financial economy**.

Eligibility:

Bachelor's Degree in any discipline with **minimum of 50% marks** (or equivalent CGPA) from a recognised university.

Number of Seats (SFS) - 60 (Self Finance Seats)

Selection Process Through a Departmental Level Entrance Test. Reservation as per university rules.

Course Fees As per rules and norms prescribed by the Govt. of Rajasthan & J.N.V.U. Jodhpur

Program Outcomes (POs) of MBA Fintech

PO1: Management Knowledge:- Graduates will be able to apply fundamental and advanced management principles across core functional areas such as finance, marketing, operations, and human resources, while integrating fintech concepts. They will demonstrate the ability to use interdisciplinary knowledge to address complex business problems in dynamic and technology-driven financial environments.

PO2: Financial & FinTech Expertise:- Graduates will develop a comprehensive understanding of financial systems, markets, instruments, and institutions along with emerging fintech innovations such as digital payments, blockchain, cryptocurrencies, and digital lending. They will be capable of applying financial theories and fintech tools in modern business contexts.

PO3: Analytical & Critical Thinking:- Graduates will be proficient in analyzing financial and business data using quantitative techniques, statistical tools, and data analytics platforms. They will demonstrate critical thinking in interpreting data, identifying trends, and making evidence-based decisions under uncertainty.

PO4: Technology Application:- Graduates will be able to effectively use modern technologies such as artificial intelligence, machine learning, blockchain, cloud computing, and big data analytics in financial services. They will understand the transformative role of technology and apply it to improve efficiency, innovation, and decision-making.

PO5: Problem Solving & Decision Making:- Graduates will demonstrate the ability to identify, define, and solve complex financial and business problems using structured approaches and fintech tools. They will integrate knowledge from multiple domains to make strategic and operational decisions that enhance organizational performance.

PO6: Risk Management & Compliance:- Graduates will be equipped to identify, analyze, and manage various financial risks including credit, market, operational, and cybersecurity risks. They will also understand regulatory frameworks and ensure compliance in fintech operations and financial decision-making.

PO7: Ethics, Communication & Leadership:- Graduates will demonstrate ethical behavior, professional integrity, and corporate governance in financial practices. They will communicate effectively with stakeholders through reports and presentations and exhibit leadership and teamwork skills in multidisciplinary environments.

PO8: Global Perspective & Lifelong Learning:- Graduates will develop a global outlook on financial systems and fintech innovations while contributing to financial inclusion and sustainable development. They will also recognize the need for continuous learning and adapt to evolving technologies, industry trends, and regulatory changes.

MASTER OF BUSINESS ADMINISTRATION (Fintech)

NSQF Level 7

Fintech: Financial Technology

Pos: Program Outcomes

DCC: Discipline Centric Course

DSE: Disciplinary Specific Elective

SEM: Seminar

DPR: Dissertation/Project

GEC: Generic Elective Course

AEC: Ability Enhancement Course

SEC: Skill Enhancement Course

VAC: Value Aided Course

IOJ: Internship or On the Job Experience

CEE: Community Engagement Course

L: Lecture

T: Tutorial

P: Practical

CA: Continuous Assessment

EOSE : End of Semester Examination

Scheme of Examination Master of Business Administration (Fintech)

1. **Duration and Structure of the Programme** A candidate admitted to the Master of Business Administration Financial Technology (MBA- FinTech) programme shall be required to pursue a regular course of study for a period of two academic years, comprising four semesters. The candidate must complete all four semesters within a maximum duration of four years from the date of admission to the programme.
2. **Semester-wise Course of Study and Examination** There shall be a separate course of study and a separate examination for each semester. The curriculum shall consist of Theory Papers and Practical Components, which include Social Outreach and Culture, Capstone Project, Seminar, and Summer Internship Project. The maximum marks for each component shall be as prescribed in the detailed course design.
3. **Evaluation Pattern for Theory Papers** All theory papers (except Social Outreach and Culture, Capstone Project, Seminar, and Summer Internship Project) shall carry a maximum of 100 marks, distributed as follows:
 - **Semester End Examination:** 70 marks (to be conducted and evaluated as per university rules).
 - **Continuous Assessment:** 30 marks (The mode and components of continuous assessment shall be at the discretion of the concerned faculty member and may include attendance, quizzes, presentations, case studies, class participation, or any other appropriate criteria).

4. Practical Components and Their Objectives

4.1 Seminar (60 Hours) The Seminar provides students with an opportunity to explore contemporary issues, emerging trends, and research developments in management and related fields. Students are expected to select a relevant topic, review existing literature, and present their analysis through a structured presentation. The seminar aims to develop critical thinking, research orientation, and presentation skills while encouraging academic discussion and knowledge sharing.

4.2 Social Outreach and Culture (60 Hours) The Social Outreach and Culture component aims to sensitize students to societal challenges and community development issues. Through participation in outreach activities, students engage with local communities, NGOs, or social initiatives to understand social problems and contribute to sustainable development efforts. This activity helps students develop social responsibility, ethical awareness, teamwork, and leadership skills while applying management knowledge for community welfare.

4.3 Capstone Project (120 Hours) The Capstone Project enables students to integrate the knowledge and skills acquired during the programme and apply them to real-world business problems within their chosen functional area. The project involves identifying a managerial issue, collecting and analyzing relevant data, and proposing practical solutions. It helps students develop analytical thinking, problem-solving abilities, and professional presentation skills.

4.4 Summer Internship Project (180 Hours) Students shall undertake a Summer Internship Project for a duration of 6–8 weeks after the completion of the Second Semester. The internship provides practical exposure to organizational functioning and real business environments. Students work on assigned tasks or projects related to management functions in an approved organization. This experience helps students understand workplace dynamics, apply theoretical concepts in practice, and develop professional skills such as communication, teamwork, and problem-solving.

5. Evaluation of Practical Components

5.1 Social Outreach and Culture The Social Outreach and Culture component shall be evaluated for a total of 50 marks, distributed as follows:

- **Continuous Assessment:** 15 marks (Project Proposal – 5 marks, Interim Progress Review – 5 marks, Final Project Report – 5 marks).
- **Final Evaluation:** 35 marks (Project Presentation – 20 marks, Viva-Voce – 15 marks).

Continuous assessment for the Seminar shall be conducted by the faculty mentor allotted by the Head of the Department. The final evaluation of the Seminar shall be carried out jointly by two faculty members appointed by the Head of the Department.

5.2 Seminar the Seminar shall be evaluated for a total of 50 marks, distributed as follows:

- Continuous Assessment: 15 marks
- Final Evaluation: 35 marks

Continuous assessment for the Seminar shall be conducted by the faculty mentor allotted by the Head of the Department. The final evaluation of the Seminar shall be carried out jointly by two faculty members appointed by the Head of the Department.

5.3 Summer Internship Project (Report and Viva Voce) The Summer Internship Project shall be evaluated for a total of 100 marks, distributed as follows:

- **Continuous Assessment:** 30 marks (Project Proposal – 15 marks, Interim Progress Review – 15 marks).
- **Final Evaluation:** 70 marks (Project Presentation and Viva-Voce – 35 marks, Final Project Report - 35 marks).

5.4 Capstone Project (Report and Viva Voce) The Capstone Project shall be evaluated for a total of 100 marks, distributed as follows:

- **Continuous Assessment:** 30 marks (Project Idea/Innovation – 15 marks, Interim Progress Review – 15 marks).
- **Final Evaluation:** 70 marks (Project Presentation and Viva-Voce – 35 marks, Final Project Report - 35 marks).

Continuous assessment for practical components shall be conducted by the faculty mentor allotted by the Department. The final evaluation of the Capstone project shall be carried out jointly by one internal faculty member and one external examiner.

Note: Practical papers (Social Outreach and Culture, Capstone Project, Seminar, and Summer Internship Project) shall **not** be subject to re-evaluation.

6. **Minimum Pass Percentage** A candidate must secure a minimum of **40%** marks in each paper (considering the aggregate of Semester End Examination and Continuous Assessment) and **50%** of the aggregate marks in all papers of the semester examination to be declared passed in that semester.
7. **Reappearance as an Ex-Student** A candidate who fails at an examination and reappears as an ex-student shall not be required to submit or appear again for the practical papers (Social Outreach and Culture, Capstone Project, Seminar, and Summer Internship Project). The marks previously obtained in these components shall be carried forward, unless the candidate has failed in that particular practical component. However, marks of continuous assessment shall be retained and transferred in all cases. Absentees in the practical examination will have to appear with the subsequent semester batch. No re-exam will be conducted.
8. **Elective Specializations** Every candidate is required to opt for **Electives specializations**. Once chosen, the elective specializations cannot be changed. The elective courses will be announced by the Head of the Department at the commencement of the relevant semester, and the decision of the Head of the Department shall be final.
- The candidate shall study **Five Courses** from the list of Specialisations provided, two courses in the second semester, two courses in the third semester, one course in fourth semester.
9. **Medium of Instruction and Examination** The medium of instruction and examination for all courses shall be **English**.

10. Additional Provisions

- a. All theory papers shall include case study discussions as an integral part of the teaching-learning and assessment pedagogy.
- b. Although all subjects include suggested teaching pedagogies and assessment tools, the detailed pedagogy, assessment methods, academic schedule, case studies, and reference materials will be shared as and when required by the concerned faculty member at the commencement of the course.

Master of Business Administration – (Fintech)

SEMESTER - I

Course Code	Title of Course	Category	L-T-P	CA	EOSE	Total	Credits
MFT7101T	Principles of Management	DCC	4-0-0	30	70	100	4
MFT7102T	Organizational Behaviour	DCC	4-0-0	30	70	100	4
MFT7103T	Accounting for Managers	DCC	4-0-0	30	70	100	4
MFT7104T	Managerial Economics	DCC	4-0-0	30	70	100	4
MFT7105T	Quantitative Techniques in Management – I	DCC	4-0-0	30	70	100	4
MFT7106T	Digital payments & Innovation	DSE	4-0-0	30	70	100	4
MFT7107T	Python for Finance	DSE	4-0-0	30	70	100	4
MFT7108S	Social Outreach & Culture	CEE		15	35	50	2
			28-0-0	225	525	750	30

SEMESTER – II

Course Code	Title of Course	Category	L-T-P	CA	EOSE	Total	Credits
MFT7201T	Financial Management	DCC	4-0-0	30	70	100	4
MFT7202T	Marketing Management	DCC	4-0-0	30	70	100	4
MFT7203T	Human Resource Management	DCC	4-0-0	30	70	100	4
MFT7204T	Introduction to Financial Markets	DCC	4-0-0	30	70	100	4
MFT7205T	Investment Strategies	DSE	4-0-0	30	70	100	4
MFT7206T	Elective –I	DSE	4-0-0	30	70	100	4
MFT7207T	Elective-II	DSE	4-0-0	30	70	100	4
MFT7208S	Seminar	SEC	--	15	35	50	2
			28-0-0	225	525	750	30

SEMESTER III

Course Code	Title of Course	Category	L-T-P	CA	EOSE	Total	Credits
MFT7301T	Quantitative Techniques in Management -II	DCC	4-0-0	30	70	100	4
MFT7302T	Professional Communication Skills	SEC	4-0-0	30	70	100	4
MFT7303T	Elective –III	DSE	4-0-0	30	70	100	4
MFT7304T	Elective-IV	DSE	4-0-0	30	70	100	4
MFT7305S	Summer Internship Project Report & Viva-Voce	IOJ	---	30	70	100	4
			16-0-0	150	350	500	20

SEMESTER IV

Course Code	Title of Course	Category	L-T-P	CA	EOS E	Total	Credits
MFT7401T	Strategic Management	DCC	4-0-0	30	70	100	4
MFT7402T	Entrepreneurship & Start-up Eco-system	DCC	4-0-0	30	70	100	4
MFT7403T	Fintech Governance, Regulation & Ethics	DSE	4-0-0	30	70	100	4
MFT7404T	Elective-V	DSE	4-0-0	30	70	100	4
MFT7405S	Capstone Project	DPR	----	30	70	100	4
			16-0-0	150	350	500	20

FINANCIAL TECHNOLOGY- ELECTIVE COURSES

FT1 - Artificial Intelligence (AI) & Machine Learning (ML) for finance
FT2 - Analytics for Finance
FT3 - Cyber Security in Fintech
FT4 - Algorithmic Trading
FT5 - Blockchain & Digital currencies
FT6 - Digital banking & Fintech product management
FT7 - Financial Data Engineering & Big Data Systems
FT8 - Legal Aspects of Fintech

Semester I

MFT7101T : PRINCIPLES OF MANAGEMENT

Course Objective:

1. To impart the modern management concepts, theories and practices.
2. To make students apply management concepts and practices for decision making.

Course Learning Outcomes:

1. Create ability to deal with day to day managerial functions
2. Apply Management concepts, tackle the complex problems relating to management

Contents:

- UNIT I- Introduction to Management: Basic concepts: Manager, Managing, Workplace, Organization, Management functions and roles of managers, Mintzberg's managerial roles, Universality of management, Approaches to management, Managerial competencies and managerial skills, Changing nature of the manager's job, Importance of customers, innovation, and sustainability in management.
- UNIT II- Planning: Concept, nature, need, and importance of planning, Management by Objectives (MBO): Concept, process, and benefits, Planning and performance, Goals and plans: Types of goals and plans, Setting goals and developing plans, Approaches to goal setting and planning, Planning in dynamic and uncertain environments.
- UNIT III- Organizing: Concept and process of organizing, Organizational structures and design, Principles of organizing: Work specialization, departmentalization, chain of command, span of control, Centralization and decentralization, Formalization in organizations, Mechanistic and organic structures, Factors affecting organizational structure.
- UNIT IV- Contemporary Organizational Designs: Traditional organizational designs, Adaptive organizations, Boundaryless organization, Virtual organizations, Learning organizations, Flexible work arrangements: Flexi work and tele-working, Global organizations.

UNIT V- Decision Making and Controlling: Decision-making process, Rationality, bounded rationality, and intuition in decision making, Evidence-based management, Types of decisions and decision-making conditions, Decision-making approaches and biases; Controlling: Concept, need, and importance, The control process, Types of controls: Feed-forward, concurrent, and feedback control, Financial and information controls, Benchmarking of best practices.

SUGGESTED READINGS:

1. Stephen P. Robbins, Sanghamitra Bhattacharyya, David A. DeCenzo and Madhushree Nanda Agarwal , Essentials of Management , Pearson Education.
2. RickyW.Griffin, Management, Cengage Learning
3. Harold Koontz, O'Donnell and Heinz Weihrich, Essentials of Management. Tata McGraw Hill.
4. Stoner, Management, PHI Learning.
5. Richard L. Daft, Principles of Management, Cengage Learning.
6. Heinz Weihrich and Harold Koontz, Management: A Global Perspective,11/e,TataMcGraw Hill.
7. Robbins and Coulter: Management, Pearson.
8. Marie-Joëlle Browaeys, Understanding Cross-cultural Management, FT Press.
9. RickyW. Griffin, Management, Cengage Learning.

MFT7102T: ORGANIZATIONAL BEHAVIOUR

Course Objectives:

The objective of the course is to help students develop an understanding of the basic management concepts and behavioural processes in organizations which are important for them to adapt to the changing corporate environment.

Course Learning Outcomes:

- Understanding the concept of organizational behaviour
- Strengthening the foundations of individual behaviour with an understanding of human personality, perception, learning and emotions

Contents:

UNIT I-	Introduction to Organizational Behaviour; Introduction to Individual Behaviour: Personality: Determinants, Measurement, Different Traits; Perception: Process, Factors, Attribution Theory; Learning: Approaches, Measurement; Attitudes, Values and Emotions
UNIT II-	Interpersonal Relationship: Transactional Analysis :Ego States, Transactions, Life Positions, Stroke Analysis, Games Analysis; Johari Window, Motivation at Work: Introduction, Content Models of Motivation, Process Models of Motivation, Use of Motivation
UNIT III-	Leadership and followership: Introduction, Trait, Behavioral and Contingency Approaches to leadership, Transactional and Transformational leadership.
UNIT IV-	Work teams and Groups: Introduction, Reasons for joining groups, Types of groups, Group Cohesiveness, Group Think and Risky Shift
UNIT V-	Stress and Well-being at work: Introduction, Sources, Reaction and Management of workplace stress, Organization Structure and Design, Positive Psychology, Psychological Capital, Organizational Citizenship Behaviour

Suggested Readings:

1. *Luthans, F. Organizational Behaviour: An Evidence Based Approach, McGraw-Hill Irwin.*
2. *Nelson, D.L., Quick, J.C., & Khandelwal, . ORGB: A South Asian Perspective. Cengage Learning India Pvt. Ltd.*
3. *Nelson, D.L., Quick, J.C., & Khandelwal. Organizational Behaviour: A South Asian Perspective (. Cengage Learning India Pvt. Ltd.*
4. *Pareek, U. and Khanna, S. (2016). Understanding Organizational Behaviour. New Delhi: Oxford University Press.*
5. *Robbins, S. P., & Judge, T.A. & Vohra, N Organizational Behaviour. New Delhi: Pearson Education.*
6. *Singh, K.. Organizational Behaviour: Text and Cases. New Delhi: Vikas Publication.*

MFT7103T: ACCOUNTING FOR MANAGERS

Course Objectives:

- The basic purpose of this course is to develop a strategic and policy perspective with respect to the principles of accounting and utilization of accounting information for general purpose decision making in an organisation. The emphasis is on core ideas and techniques with reinforced understanding using practical examples.

Course Learning Outcomes:

- Understanding how accounting decisions affect real company practices.
- Understand the concepts of Depreciation, Inventory valuation and the methods employed by Indian Companies.
- Strengthening the foundations of the analytical approach to Managerial decision-making.

Contents:

- UNIT- I Introduction to Management Accounting: Meaning, nature, scope, and objectives of management accounting, Difference between financial accounting, cost accounting, and management accounting, Role of management accounting in managerial decision making, Tools and techniques of management accounting, Limitations of management accounting
- UNIT- II Financial Statement Analysis: Meaning and objectives of financial statement analysis, Comparative financial statements, Common size statements, Trend analysis, Ratio analysis and interpretation.
- UNIT- III Marginal Costing and Cost–Volume–Profit Analysis: Concept of marginal costing, Break-even analysis, P/V ratio, margin of safety, Cost–volume–profit analysis, Decision making under marginal costing.
- Unit IV Budgetary Control: Meaning and objectives of budgeting, Types of budgets (sales, production, cash, flexible budgets), Preparation of budgets, Budgetary control and its advantages, Zero-based budgeting; Standard Costing and Variance Analysis: Meaning and objectives of standard costing, Setting of standards, Variance analysis: material, labour, and overhead variances, Interpretation and managerial use of variances.
- Unit V- Concept and meaning of Accounting Analytics in financial decision-making, Importance of Accounting Analytics in analyzing financial statements and business performance, Applications of Accounting Analytics in budgeting, cost control, fraud detection, and financial reporting.

Suggested Readings:

1. Anthony, R.N., Hawkins, F.D., & Merchant, K.A. Accounting: Text and Cases (latest ed.). Tata McGraw Hill.
2. Needles B.E., Powers, M., & Crosson, S.V. Principles of Financial Accounting (latest ed.). South-Western College/West.
3. Hilton, R.W., & Platt, D.E. Managerial Accounting (latest ed.). Tata McGraw Hill.
4. Narayanaswamy, R. Financial Accounting: A Managerial Perspective (latest ed.). Prentice Hall of India.
5. Horngren, T.C., Datar, S.M., & Rajan, M.V. Horngren's Cost Accounting: A Managerial Emphasis (latest ed.). Pearson.
6. Horngren, T.C., Sundem, G.L., Schatzberg, J., & Burgstahler, D. Introduction to Management Accounting (latest ed.). Pearson. Spiceland, D., Thomas, W.M., & Herrmann, D. Financial Accounting (latest ed.). McGraw-Hill.

MFT7104T : MANGERIAL ECONOMICS

Course Objective

- To develop an understanding of microeconomic and macroeconomic principles relevant to business decision-making.
- To equip students with analytical tools for demand estimation, cost analysis, and pricing decisions.
- To enable application of economic theories in solving real-world managerial problems under uncertainty.

Course Learning Outcomes

1. Apply economic concepts and principles in managerial decision-making.
2. Analyze demand patterns and forecast future demand using appropriate techniques.
3. Evaluate production and cost relationships for efficient resource allocation.
4. Assess pricing strategies under different market structures.
5. Analyze business decisions under risk, uncertainty, and changing economic conditions.

UNIT 1: Introduction to Managerial Economics:- Meaning, Nature, Scope & Significance, Role of Managerial Economist, Micro vs Macro Economics in business decisions, Opportunity cost and decision-making principles, Incremental and marginal analysis

UNIT 2: Demand and Forecasting:- Law of demand and elasticity , Consumer behavior (utility & indifference curve), Demand estimation techniques, Demand forecasting methods.

UNIT 3: Production and Cost Analysis:- Production function (short & long run), Laws of returns and scale, Isoquants and optimization, Cost concepts and curves, Economies of scale.

UNIT 4: Market Structure and Pricing:- Perfect competition, monopoly, monopolistic competition, oligopoly, Pricing strategies and policies, Break-even analysis, Profit maximization

UNIT 5: Introduction to Macroeconomics:- Meaning, Nature & Scope of Macroeconomics, Key macroeconomic variables: GDP, inflation, unemployment, National income concepts and measurement, Business cycles and economic fluctuations, Monetary policy and fiscal policy

Suggested Readings

- D.N. Dwivedi – *Managerial Economics* (Vikas Publishing House)
- Geetika et al. – *Managerial Economics* (McGraw Hill India)
- Suma Damodaran – *Managerial Economics* (Oxford University Press India)
- H.L. Ahuja – *Managerial Economics* (S. Chand)
- K.K. Dewett – *Modern Economic Theory* (S. Chand)

MFT7105T : QUANTITATIVE TECHNIQUES IN MANAGEMENT-I

Course Objective

- To provide students with a strong foundation in statistical and quantitative techniques for managerial decision-making.
- To develop the ability to collect, analyze, and interpret data using appropriate statistical tools.
- To equip students with analytical skills for solving business problems involving uncertainty, forecasting, and data-driven decisions.

Course Learning Outcomes

1. Understand and apply statistical methods for data collection, classification, and presentation.
2. Compute and interpret measures of central tendency, dispersion, and skewness for business decision-making.
3. Analyze relationships between variables using correlation and regression techniques.
4. Apply time series analysis and index numbers for forecasting and trend analysis.
5. Use probability concepts and probability distributions to support decision-making under uncertainty.

Content

- UNIT 1:** Introduction and Definition, Functions, Importance, Limitations; Statistical investigation - Planning, Types, Collection of Data; Editing, Classification and tabulation; Presentation of data - Graphic and Diagrammatic
- UNIT 2:** Measures of Central Tendency: Arithmetic, Geometric, Harmonic and Weighted Mean, Mode, Median and Partition Values, Moving Progressive and Composite Average, Measures of Dispersion - Absolute and Relative (Mean, Standard and Quartile deviation); Measures of Skewness - Absolute and Relative (Karl Pearson and Bowley's Methods)
- UNIT 3:** Correlation - Meaning, Importance, Types, Methods-Scatter Diagram, Karl Pearson's Spearman (Rank) and Concurrent Deviation Method; Regression: Meaning, Importance, coefficients, equations and estimation, standard error of estimates
- UNIT 4:** Analysis of Time Series - Meaning, Importance, Components, Measurement of Secular Trend and Seasonal Variations; Construction of Index Number - base conversion, baseshifting, deflation, test of reversibility; Interpolation and Extrapolation - Binomial, Newton and Lagrange methods
- UNIT 5:** Probability & Probability Distribution: Independent and Dependent Events, Mutually Exclusive Events, Classical approach to probability, Addition and multiplicative law of probability, Conditional probability, Bayes Theorem, Probability Distribution

Suggested Readings

1. D.C. Sancheti & V.K. Kapoor – *Statistics: Theory, Methods and Applications* (S. Chand Publishing)
2. S.P. Gupta – *Statistical Methods* (Sultan Chand & Sons)
3. J.K. Sharma – *Business Statistics* (Pearson India)
4. B.N. Gupta – *Statistics for Management* (Sahitya Bhawan Publications)

MFT7106T: DIGITAL PAYMENTS & INNOVATION

Course Objective

To familiarize students with the evolution of digital payment systems, emerging financial technologies, regulatory frameworks, and innovations transforming the digital financial ecosystem.

Course learning Outcome

- Understand the evolution, structure, and ecosystem of digital payment systems in the global and Indian context.
- Analyze different digital payment instruments such as mobile wallets, UPI, cards, payment gateways, and digital banking platforms.
- Evaluate the role of financial technologies in transforming traditional payment systems and promoting financial inclusion.
- Assess the security, regulatory, and risk management aspects of digital payments.
- Examine innovative trends in payment technologies including AI, biometrics, blockchain-based payments, and open banking.
- Develop strategic insights into digital payment innovations and their impact on financial institutions, businesses, and consumers.

Content

- Unit 1: Evolution of Digital Payments - Concept and importance of digital payments
Evolution of payment systems: barter to digital economy Overview of payment infrastructure, Types of digital payments: cards, mobile payments, internet banking, Digital payment ecosystem and stakeholders , Role of central banks and financial institutions
- Unit 2: Digital Payment Instruments & Platforms-Card-based payments: debit cards, credit cards, prepaid cards, Mobile wallets and payment apps, Unified Payments Interface (UPI) and QR payments, Contactless payments and NFC technology, Payment gateways and payment aggregators Case studies of major platforms like Google Pay, PhonePe, and Paytm
- Unit 3: FinTech and Innovation in Payments, Concept and scope of Financial Technology, Role of Artificial Intelligence in payments ,Blockchain technology and cryptocurrencies, Smart contracts and decentralized finance, Open banking and API economy, Innovation trends in global digital payments
- Unit 4: Security, Risk and Regulation- Cybersecurity in digital payments, Fraud risks and prevention mechanisms, Data protection and privacy issues, Regulatory framework in India, Role of Reserve Bank of India in payment systems, Payment regulations and compliance, Consumer protection in digital transactions

Unit 5: Digital Payment Economy & Future Trends- Digital financial inclusion, Impact of digital payments on economic development, Government initiatives such as Digital India, Global trends in digital payments, Central Bank Digital Currency (CBDC), Future innovations and emerging business models in digital finance

Suggested Readings

1. Digital Bank – Chris Skinner
2. The FINTECH Book – Susanne Chishti & Janos Barberis
3. FinTech: The New DNA of Financial Services – Pranay Gupta
4. Blockchain Basics – Daniel Drescher

MFT7107T : PYTHON FOR FINANCE

Course Objective

The course aims to introduce students to the use of **Python programming for financial analysis, data processing, and financial modeling**, enabling them to analyze financial data and develop analytical solutions used in modern finance.

Course Learning Outcomes

- Understand the fundamentals of Python programming and its applications in financial analysis.
- Apply Python libraries for financial data manipulation and visualization.
- Analyze financial datasets using Python for tasks such as return calculation, risk analysis, and portfolio evaluation.
- Implement Python-based models for financial forecasting and investment analysis.
- Develop basic algorithms for financial data processing, trading strategies, and quantitative analysis.
- Interpret and present financial insights derived from Python-based analytical tools for decision making

Unit 1: Introduction to Python for Finance- Overview of programming in finance- Introduction to Python- Installing Python and development environments (Jupyter Notebook, Anaconda)- Basic Python syntax and structure- Variables, data types and operators- Control structures: loops and conditional statements- Writing simple financial calculations using Python

Unit 2: Data Handling and Financial Data Analysis Introduction to financial datasets Working with arrays using - Data manipulation-Importing financial data from CSV and online sources-Data cleaning and preprocessing-Descriptive statistics for financial data

Unit 3: Data Visualization for Financial Analysis, Importance of visualization in financial decision-making-Plotting charts-Visualizing stock prices, returns, and trends-Time series data visualization-Introduction to advanced visualization with Seaborn

Unit 4: Financial Modeling and Analysis with Python- Time value of money calculations using Python, Portfolio analysis and risk measurement, Return calculation and volatility analysis, Introduction to financial modeling, financial computations, Introduction to algorithmic trading concepts

Unit 5: Applications of Python in Modern Finance-Introduction to quantitative finance concepts Financial forecasting and predictive analytics- Basic machine learning concepts in finance- Automation of financial reports- Case studies in stock market analysis- Ethical issues and limitations of automated financial

systems

Suggested Readings

1. Python for Finance – Yves Hilpisch
2. Python for Data Analysis – Wes McKinney
3. Hands-On Machine Learning with Scikit-Learn, Keras, and TensorFlow – Aurélien Géron

Semester II

MFT7201T: FINANCIAL MANAGEMENT

Course Objective

- To provide knowledge of financial decision-making in corporate environments.
- To develop skills in investment, financing, and dividend decisions.
- To enable analysis of financial statements and efficient management of financial resources.

Course Learning Outcomes

1. Understand and apply financial management principles in business decisions.
2. Evaluate investment opportunities using capital budgeting techniques.
3. Analyze capital structure and cost of capital for optimal financing decisions.
4. Manage working capital effectively for organizational efficiency.
5. Assess dividend policies and interpret financial statements for strategic planning.

- UNIT 1: Introduction to Financial Management:-** Nature, scope, and objectives, Wealth maximization vs profit maximization, Financial decisions, Time value of money, Indian financial system.
- UNIT 2: Capital Budgeting:-** Importance and process , Payback, NPV, IRR, PI methods, Risk analysis, Capital rationing.
- UNIT 3: Capital Structure and Cost of Capital:-** Theories of capital structure, Leverage analysis, Cost of capital (WACC), EBIT-EPS analysis
- UNIT 4: Working Capital Management:-** Concepts and determinants, Cash management, Inventory management , Receivables management
- UNIT 5: Dividend and Financial Analysis:-** Dividend theories, Dividend policies in India, Financial planning, Ratio analysis, Corporate restructuring basics

Suggested Readings

- I.M. Pandey – *Financial Management* (Vikas Publishing House)
- Prasanna Chandra – *Financial Management* (McGraw Hill India)
- M.Y. Khan & P.K. Jain – *Financial Management* (McGraw Hill India)
- S.N. Maheshwari – *Financial Management* (Vikas Publishing)
- R.P. Rustagi – *Financial Management* (Taxmann Publications)

MFT7202T : MARKETING MANAGEMENT

Course Objective:

To introduce the students to the concepts, strategies and contemporary issues involved in the marketing of products and services.

Course Learning Outcomes:

- Understanding the nature and scope of marketing
- Develop an understanding of various marketing philosophies
- Understanding the marketing mix and marketing environment
- Understanding segmentation, targeting and positioning
- Understanding consumer behavior and its application in marketing
- Understanding contemporary issues in marketing.

Course Contents

UNIT- I	Introduction to Marketing: Nature and Scope of Marketing, Marketing Concepts, Marketing Philosophies, Customer Value, Holistic Marketing. Marketing Environment: Environmental monitoring, Understanding the impact of Macro and Micro environment on Marketing, Global Marketing.
UNIT- II	Identifying and Selecting Markets: Consumer Buying Behaviour, Organizational Buying Behaviour, Market Segmentation, Targeting and Positioning, Marketing Research and Market Information. Strategic Marketing Planning Process: Competitor analysis, Marketing Warfare Strategies, Marketing Planning Process
UNIT- III	Product Mix Strategies: Product, Planning and Development, Product Life Cycle, New Product development, Brands, Packaging and Labelling. Developing Pricing Strategies: Setting Price, Factors influencing Price Determination
Unit IV -	Channels of Distribution: Designing Distribution Channels, Managing Conflicts and Controls in Channels, Retailing, Wholesaling and Logistics. Marketing Communication: Role of Promotion in Marketing, Integrated Marketing Communication, Determining Promotional Mix, Advertising, Sales Promotion Public Relations, Personal Selling and Sales Management.
Unit V	Trends in Marketing: Service Marketing, Social Media Marketing, Green Marketing, Customer Relationship Management, Rural marketing, other emerging trends.

Suggested Readings:

1. Etzel, M. J., Bruce, J. W., Stanton, W. J., & Pandit, A. Marketing (latest ed.). New Delhi: Tata McGraw-Hill.
2. Kotler, P. & Armstrong, G. Principles of Marketing (latest ed.). Pearson.
3. Kotler, P., Keller, K., Koshy, L., & Jha, M. Marketing Management: A South Asian Perspective (latest ed.). New Delhi: Pearson
4. Perrault, W.D (Jr.), Cannon, J.P., & McCarthy, E.J. Basic Marketing. New Delhi: Tata McGraw-Hill.
5. Ramaswamy, V. S. & Namakumari, S. Marketing Management: Global perspective Indian context (latest ed). New Delhi: Macmillan.
6. Saxena, R. Marketing Management (latest ed.). New Delhi: Tata McGraw Hill.

MFT7203T : HUMAN RESOURCE MANAGEMENT

Course Objective:

The objective of the course is to sensitize students to the systems and strategies in managing people professionally in view of the rapidly evolving aspirations of individuals, and changing business contexts. The course is designed to familiarize participants with human resource policies and practices that they need to know regardless of their field of managerial functions. The course highlights the need for well-designed human resource policies that promote employee motivation and performance, and in achieving organizational objectives. The course will provide basic concepts, techniques, and practices of human resource management in diverse contexts.

Course Learning Outcome:

- Participants will be able to understand the importance of managing human resources professionally, in view of the constantly changing aspirations of individuals the business context, and organizational dynamics.
- Participants will be able to understand the foundations of managing human resources in organizations, in terms of systems, strategies and practices.

Course Content:

UNIT- I	Foundations and Principles of Managing People in Organizations: Meaning and importance of Human Resource Management (HRM), concepts and perspectives of managing people in organizations. Contemporary issues and challenges in managing human resources in modern organizations. Job analysis: concept, process, methods, and outcomes including job description and job specification.
UNIT- II	Human Resource Planning: Concept, importance, and process of human resource planning. Demand and supply forecasting techniques. Managing workforce changes including downsizing and employee retention strategies. Talent acquisition process including recruitment, selection, and employee induction/orientation
UNIT- III	Training and Development: Concept, importance, process, and methods of employee training and development. Performance Management: Performance management systems, appraisal methods, and strategies for improving employee performance. Learning in organizations and management of compensation and rewards, including salary structures, incentives, and employee benefits.
Unit IV -	Industrial Relations: Dynamics of employer, employee, and the state in industrial relations. Trade unions: evolution, role, and future trends. Industrial harmony through workers' participation in management, collective bargaining, grievance handling, discipline, dispute resolution, and conflict management. Employee engagement and its importance in organizational performance. International dimensions of Human Resource Management.

Unit V- **Concept and Meaning of HR Analytics** – Introduction to HR analytics, role of data in human resource management, and importance of data-driven HR decision making. Types and Metrics in HR Analytics – Descriptive, predictive, and prescriptive analytics; key HR metrics such as employee turnover, absenteeism, performance indicators, and workforce productivity. Applications of HR Analytics – Use of HR analytics in recruitment and selection, performance management, employee engagement, retention strategies, and workforce planning.

Suggested Readings

- Armstrong, M., & Taylor, S. Armstrong's Handbook of Human Resource Management Practice. London: Kogan Page.
- Aswathappa, K. Human Resource Management: Text and Cases. New Delhi: McGraw Hill Education.
- Bohlander, G. W., & Snell, S. A. Principles of Human Resource Management. New Delhi: Cengage Learning India.
- Carbonara, S. Manager's Guide to Employee Engagement. New York: McGraw Hill Education.
- Cascio, W. Managing Human Resources: Productivity, Quality of Work Life, Profits. New York: McGraw Hill Education.
- DeCenzo, D. A., Robbins, S. P., & Verhulst, S. L. Human Resource Management (12th ed.). Wiley.
- Dessler, G., & Varkkey, B. Human Resource Management. New Delhi: Pearson Education.
- Espinoza, C., & Ukleja, M. Managing the Millennials: Discover the Core Competencies for Managing Today's Workforce. New Jersey: Wiley.
- Gomez-Mejia, L. R., Balkin, D. B., & Cardy, R. L. Managing Human Resources. Essex: Pearson Education.
- Ivancevich, J. M. Human Resource Management. New York: McGraw Hill Education.
- Muller-Camen, M., Croucher, R., & Leigh, S. Human Resource Management: A Case Study Approach. New Delhi: Viva Books.
- Sharma, R. C. Industrial Relations and Labour Legislation. New Delhi: Prentice Hall India.
- Venkat Ratnam, C. S., & Dhal, M. Industrial Relations. New Delhi: Oxford University Press.

MFT7204T: INTRODUCTION TO FINANCIAL MARKETS

Course Objectives

- To provide students with a basic understanding of the structure and functioning of financial markets.
- To familiarize students with different financial instruments and market participants.
- To understand the role of financial markets in economic development.
- To develop knowledge about trading mechanisms and regulatory frameworks.
- To introduce students to the functioning of capital markets and financial institutions.

Course Outcomes

- Understand the structure and importance of financial markets in an economy.
- Identify different financial instruments and their functions.
- Explain the roles of financial institutions and market intermediaries.
- Analyze the functioning of capital markets and money markets.
- Understand the regulatory framework governing financial markets.

Unit 1- Basics of Financial Markets-Meaning and importance of financial markets- Structure of the financial system, Functions of financial markets in economic development, Participants in financial markets, Role of financial markets in capital formation

Unit II-Money Market-Meaning and characteristics of money market, Major money market instruments, Treasury Bills, Commercial Paper, Certificates of Deposit, Role of central banks in money markets, Structure of money market in India and role of Reserve Bank of India

Unit III- Capital Market- Meaning and functions of capital markets, Primary market and secondary market, Initial Public Offerings (IPO), Role of stock exchanges such as Bombay Stock Exchange and National Stock Exchange of India, Market indices and trading mechanisms

Unit IV- Financial Instruments and Intermediaries, Equity shares, preference shares and debentures, Bonds and derivatives, Role of financial intermediaries, Merchant banks, mutual funds and insurance companies, Role of regulatory bodies such as Securities and Exchange Board of India

Unit V- Emerging Trends in Financial Markets Globalization of financial markets Financial technology and digital trading, Role of online trading platforms Risk management in financial markets Future developments and innovations in financial markets

Suggested Readings

1. Bharati V. Pathak, **Indian Financial System, 6th Edition**, Pearson India Education Services Pvt. Ltd., New Delhi.
2. Frederic S. Mishkin, **The Economics of Money, Banking and Financial Markets, 12th Edition**, Pearson Education India.
3. E. Gordon & K. Natarajan, **Financial Markets and Services, 12th Edition**, Himalaya Publishing House, Mumbai.
4. M. Y. Khan, **Indian Financial System, 11th Edition**, McGraw Hill Education (India) Pvt. Ltd., New Delhi.
5. Donald E. Fischer & Ronald J. Jordan, **Security Analysis and Portfolio Management, 6th Edition**, Pearson Education India.

MFT7205T : INVESTMENT STRATEGIES

Course Objectives

- To develop an understanding of investment principles and financial markets in the digital era.
- To analyze traditional and technology-driven investment strategies.
- To understand risk management and portfolio optimization techniques.
- To explore the role of financial technology in investment decision-making.
- To equip students with analytical tools for evaluating investment opportunities.

Course Outcomes

- Understand investment concepts, instruments, and financial market mechanisms.
- Analyze risk and return relationships in different investment strategies.
- Apply portfolio management and diversification techniques.
- Evaluate investment opportunities using quantitative and technological tools.
- Understand emerging FinTech-driven investment platforms and strategies.

Unit I- Introduction to Investment and Financial Markets Meaning and objectives of investment, Investment process and investment decision framework, Risk and return concepts, Investment avenues and asset classes, Role of financial markets and institutions, Overview of stock exchanges such as National Stock Exchange of India and Bombay Stock Exchange

Unit II-Security Analysis and Valuation, Fundamental analysis: economic, industry, and company analysis, Technical analysis and market indicators, Valuation of equity shares and bonds, Financial ratios and performance evaluation, Market trends and behavioral aspects of investing.

Unit III-Portfolio Management and Risk Management Portfolio theory and diversification Risk-return trade-off in investments Capital Asset Pricing Model (CAPM) Portfolio optimization and asset allocation Portfolio performance evaluation

Unit IV: Fin-Tech Applications in Investment, Role of Financial Technology in investment management, Algorithmic trading and automated investment strategies, Robo-advisory platforms, Use of big data and artificial intelligence in investment decisions, Online trading platforms and digital investment tools

Unit V- Emerging Investment Trends, Cryptocurrency and digital assets such as Bitcoin, Exchange traded funds (ETFs) and index investing, Sustainable and ESG investing, Global investment opportunities, Future trends in FinTech-based investment strategies

Suggested Readings

1. Investment Analysis and Portfolio Management Prasanna Chandra, **Investment Analysis and Portfolio Management**, 5th Edition, McGraw Hill Education (India).
2. Python for Finance Yves Hilpisch, **Python for Finance**, 2nd Edition, O'Reilly Media.
3. Security Analysis and Portfolio Management, Fischer & Jordan, **Security Analysis and Portfolio Management**, 6th Edition, Pearson Education India.
4. FinTech: The New DNA of Financial Services Pranay Gupta, **FinTech: The New DNA of Financial Services**, Wiley India.
5. Investment Management V. K. Bhalla, **Investment Management**, Latest Edition, S. Chand Publishing.

SEMESTER - III

MFT7301T : QUANTITATIVE TECHNIQUES IN MANAGEMENT –II

Course Objectives

- To introduce students to the fundamental concepts and applications of Operations Research in managerial decision-making.
- To develop the ability to formulate business problems as mathematical models.
- To provide knowledge of optimization techniques used in resource allocation and operational planning.
- To familiarize students with quantitative tools used for solving managerial problems in production, logistics, and project management.
- To enhance analytical and problem-solving skills using operations research techniques.

Course Outcomes

- Understand the role of operations research in managerial decision-making and business optimization.
- Formulate real-life managerial problems using mathematical and quantitative models.
- Apply operations research techniques such as linear programming, transportation, and assignment models to solve business problems.
- Analyze project scheduling and decision-making problems using quantitative tools.
- Interpret solutions from operations research models and apply them to managerial decision-making.

CONTENT

UNIT I: Algebra of Matrices and Determinants: Addition, Subtraction, Multiplication and Inversion of matrices, Solution of systems of linear equations with the help of matrix algebra

UNIT II: Operations Research: Nature, significance and purpose, basic concepts and definitions; methodology of operations research; construction, solution and testing of the models; implementation and control of the solution

UNIT III: Linear Programming: Graphical, Trial & Error and Simplex Method; Duality Problems.

UNIT IV: Network analysis (PERT and CPM): Concepts, Drawing Network and Numbering Events, Activity Time and Event Time, Project Time, Crashing the activities; Project Cost Control; Simulation

UNIT V: Transportation and Assignment Problems, Elementary concept and application, Decision Theory and Game Theory

Suggested Readings

1. Operations Research, Kanti Swarup, P. K. Gupta & Man Mohan, **Operations Research**, Latest Edition, **Sultan Chand & Sons**, New Delhi.
2. Operations Research: Theory and Applications, J. K. Sharma, **Operations Research: Theory and Applications**, 6th Edition, **Macmillan / Laxmi Publications**, New Delhi.
3. Quantitative Techniques in Management, N. D. Vohra, **Quantitative Techniques in Management**, Latest Edition, **McGraw Hill Education India**, New Delhi.
4. Operations Research, A. M. Natarajan, **Operations Research**, Latest Edition, **Pearson Education India**, New Delhi.
5. Operations Research, S. Kalavathy, **Operations Research**, 4th Edition, **Vikas Publishing House Pvt. Ltd.**, New Delhi.

MFT7302T : PROFESSIONAL COMMUNICATION SKILLS

Course Objectives

- To develop effective communication skills required in professional and business environments.
- To enhance verbal, non-verbal, and written communication abilities of management students.
- To improve interpersonal and presentation skills for managerial effectiveness.
- To develop skills for professional writing such as business letters, reports, and emails.
- To prepare students for workplace communication including meetings, negotiations, and interviews.

Course Outcomes

- Understand the importance of effective communication in business and professional settings.
- Demonstrate improved verbal and non-verbal communication skills.
- Prepare professional business documents such as reports, letters, and emails.
- Communicate effectively in meetings, presentations, and negotiations.
- Develop confidence in professional interactions and workplace communication.

Unit I	Introduction to Business Communication Meaning and importance of business communication, Process of communication, Types of communication: verbal, non-verbal, and written, Barriers to effective communication, Principles of effective communication
Unit 2	Verbal and Non-Verbal Communication, Interpersonal communication skills, Listening skills and feedback, Non-verbal communication: body language, gestures, facial expressions, Cross-cultural communication in business, Communication etiquette in professional settings
Unit 3	Business Writing Skills- Principles of effective business writing, Business letters and professional emails, Memorandums and notices, Report writing in business organizations, Drafting proposals and business documents
Unit 4	Presentation and Public Speaking, Planning and organizing presentations, Presentation tools and techniques, Voice modulation and delivery skills, Use of visual aids in presentations, Handling questions and audience interaction
Unit 5	Workplace Communication- Communication in meetings and group discussions, Negotiation and persuasion skills, Conflict management communication, Interview skills and professional etiquette, Communication in digital and virtual work environments

Suggested Readings

1. Business Communication Today, Courtland L. Bovee & John V. Thill, **Business Communication Today**, Pearson Education India.
2. Business Communication, Meenakshi Raman & Prakash Singh, **Business Communication**, Oxford University Press India.
3. Business Communication, C. S. Rayudu, **Business Communication**, Himalaya Publishing House, Mumbai.
4. Communication Skills, Sanjay Kumar & Pushp Lata, **Communication Skills**, Oxford University Press India.
5. Effective Business Communication, Asha Kaul, **Effective Business Communication**, PHI Learning Pvt. Ltd., New Delhi.

MFT7401T : STRATEGIC MANAGEMENT

Course Objectives

- To develop an understanding of strategic management concepts and their role in organizational success.
- To analyze the internal and external business environment for strategic decision-making.
- To understand the formulation and implementation of business strategies in dynamic markets.
- To explore strategic challenges faced by organizations in technology-driven industries such as FinTech.
- To develop strategic thinking and decision-making skills among management students.

Course Outcomes

- Understand the concept and importance of Strategic Management in modern organizations.
- Analyze business environments using strategic analysis tools.
- Formulate and evaluate business strategies for competitive advantage.
- Understand the implementation and control of strategies in organizations.
- Apply strategic management concepts to technology-driven sectors including FinTech.

Unit I:	Introduction to Strategic Management-Meaning and nature of strategic management, Strategic decision-making process, Levels of strategy: corporate, business, and functional, Strategic management in technology-driven industries, Role of strategy in competitive business environments
Unit II:	Environmental Analysis-External environment analysis, Industry analysis and competitive forces, Internal environment analysis, SWOT analysis, Strategic capability and competitive advantage
Unit III:	Strategy Formulation-Corporate level strategies, Business level strategies, Growth strategies and diversification, Strategic alliances and partnerships, Strategy formulation in FinTech and digital businesses
Unit IV:	Strategy Implementation- Strategy implementation process, Organizational structure and strategy, Leadership and strategic change management, Resource allocation and strategic planning Strategy implementation challenges
Unit V:	Strategy Evaluation and Emerging Strategic Trends- Strategy evaluation and control, Performance measurement and strategic control systems, Corporate governance and ethics in strategy, Strategic management in digital and FinTech ecosystems, Future strategic challenges in technology-driven market

Suggested Readings

1. Strategic Management and Business Policy Azhar Kazmi & Adela Kazmi, **Strategic Management and Business Policy**, McGraw Hill Education India.
2. Strategic Management, V. S. P. Rao & V. Harikrishna, **Strategic Management**, Excel Books India.
3. Strategic Management, Francis Cherunilam, **Strategic Management**, Himalaya Publishing House, Mumbai.
4. Strategic Management, Arthur A. Thompson Jr., A. J. Strickland & John Gamble, **Crafting and Executing Strategy**, McGraw Hill Education India.
5. Strategic Management Concepts and Cases, Fred R. David & Forest R. David, **Strategic Management: Concepts and Cases**, Pearson Education India.

MFT7402T : ENTREPRENEURSHIP AND START-UP ECO-SYSTEM

Course Objectives

- To develop an understanding of entrepreneurship and the role of entrepreneurs in economic development.
- To examine the structure and functioning of the startup ecosystem.
- To familiarize students with the process of starting and managing new ventures.
- To understand funding mechanisms and support systems available for startups.
- To encourage innovation and entrepreneurial thinking among MBA students, particularly in the FinTech sector.

Course Outcomes

- Understand the concept and importance of Entrepreneurship in modern economies.
- Analyze the components of a startup ecosystem and its stakeholders.
- Evaluate business opportunities and develop startup ideas.
- Understand funding options and institutional support for startups.
- Apply entrepreneurial skills to create and manage innovative ventures, including FinTech startups.

Content

Unit I:	Introduction to Entrepreneurship- Meaning and importance of entrepreneurship, Characteristics and role of entrepreneurs, Entrepreneurship and economic development, Types of entrepreneurs and entrepreneurial ventures, Entrepreneurship in the digital and Fintech era
Unit II:	Startup Ecosystem- Meaning and components of the startup ecosystem, Role of incubators, accelerators, and innovation hubs, Startup ecosystem in India, Government initiatives supporting startups, Role of Startup India in promoting entrepreneurship
Unit III:	Opportunity Identification and Business Planning, Identification of business opportunities, Creativity and innovation in entrepreneurship, Market research for startups, Business model development, Preparation of a business plan
Unit IV:	Financing and Managing Startups-Sources of startup funding, Angel investors and venture capital, Crowdfunding and FinTech funding platforms, Financial planning for startups, Growth and scaling strategies for new ventures
Unit V:	Legal, Ethical and Strategic Issues in Startups- Legal requirements for starting a business in India, Intellectual property rights for startups, Regulatory environment for startups, Challenges faced by startups, Future trends in entrepreneurship and FinTech innovation.

Suggested Readings

1. Entrepreneurship Development, S. S. Khanka, **Entrepreneurship Development**, S. Chand Publishing, New Delhi.
2. Entrepreneurship, Hisrich, Peters & Shepherd, **Entrepreneurship**, McGraw Hill Education India.
3. Entrepreneurship Development and Management, Vasant Desai, **Entrepreneurship Development and Management**, Himalaya Publishing House, Mumbai.
4. Entrepreneurship Development, Poornima Charantimath, **Entrepreneurship Development**, Pearson Education India.
5. Startup India: The Road Ahead, R. K. Sharma, **Startup India: The Road Ahead**, McGraw Hill Education India.

MFT7403T : FINTECH GOVERNANCE, REGULATION & ETHICS

Course Objective

- To provide a comprehensive understanding of regulatory governance and compliance frameworks in the FinTech ecosystem.
- To examine ethical, supervisory, and risk-based regulatory approaches in digital financial services.
- To equip students with the ability to analyse AML/KYC, data protection, and cybersecurity compliance requirements.
- To develop an understanding of platform regulation, digital asset compliance, and emerging regulatory technologies (RegTech).
- To foster awareness of ethical practices and responsible innovation in financial technologies.

Course Learning Outcomes

1. Explain the regulatory governance structure of FinTech ecosystems.
2. Analyse compliance obligations including AML, KYC, and reporting requirements.
3. Evaluate data protection, cybersecurity, and platform governance frameworks.
4. Assess ethical risks and governance challenges in FinTech.
5. Apply compliance strategies and regulatory principles to real-world FinTech models.

UNIT 1: FinTech Regulation and Governance: -

- Meaning, scope, and objectives of FinTech regulation
- Evolution of financial regulation: institution-based vs activity-based approaches
- Regulatory objectives:
 - Financial stability
 - Consumer protection
 - Market integrity
 - Regulatory design approaches:
 - Principles-based vs rules-based regulation
 - Risk-based supervision and proportionality
- Regulatory challenges:
 - Innovation vs regulation dilemma
- Regulatory arbitrage and cross-border risks
- Conceptual overview of policy initiatives (e.g., sandbox models, innovation hubs)

UNIT 2: Regulatory Authorities and Supervisory Framework:-

- Role and jurisdiction of key regulators:
 - Reserve Bank of India
 - Securities and Exchange Board of India
 - Insurance Regulatory and Development Authority of India
 - Financial Intelligence Unit – India (FIU-IND)
- Inter-regulatory coordination and overlapping jurisdiction

- Licensing, authorization, and supervisory mechanisms
- Inspections, enforcement, and adjudication
- Global regulatory approaches:
 - Sandboxes, innovation hubs
 - Comparative regulatory models (EU, UK, US, Singapore)
- Role of international bodies (BIS, FATF, IOSCO – conceptual overview)

UNIT 3: Compliance Architecture in FinTech Systems: -

- Compliance governance in FinTech firms:
 - Role of compliance officers and internal controls
 - Compliance culture and accountability
- Anti-MoneyLaundering obligations under the Prevention of Money Laundering Act, 2002
 - KYC and Customer Due Diligence (CDD) norms
 - Enhanced due diligence and risk-based classification
 - Suspicious Transaction Reporting (STR) and reporting obligations
- Advanced Compliance Mechanisms
 - FATF “Travel Rule” and information-sharing requirements
 - Video KYC (V-CIP) and digital onboarding norms
 - Record-keeping and audit requirements
- Outsourcing and Third-Party Risk
 - Compliance risks in outsourcing arrangements
 - Vendor due diligence and accountability frameworks

UNIT 4: Data Protection, Cybersecurity, and Platform Compliance:

- Data governance in FinTech:
 - Data lifecycle management
 - Consent, purpose limitation, and data minimization
- Data protection frameworks (conceptual reference to Digital Personal Data Protection Act, 2023)
- Data localisation and cross-border data flow issues
- Cybersecurity Compliance
 - Cyber risk management frameworks
 - Incident response, breach notification, and reporting obligations
- Ethical dimensions of cybersecurity
- Platform Regulation Compliance
 - Governance of digital platforms and intermediaries
 - Algorithmic accountability and transparency
 - Dark patterns, mis-selling, and consumer manipulation risks
- Consumer protection frameworks in digital financial services.

UNIT 5: Virtual Digital Assets (VDAs), RegTech, and Ethical Governance

- Virtual Digital Assets (VDAs) & Compliance
 - Concept and classification of VDAs
 - AML compliance for crypto exchanges under the Prevention of Money Laundering Act, 2002

- Role of reporting entities in crypto ecosystems
- Risks in VDA transactions: anonymity, cross-border flows, and enforcement challenges
- RegTech and SupTech
 - Regulatory Technology (RegTech):
 - Automation of compliance processes
 - AI-based monitoring and reporting systems
- Supervisory Technology (SupTech) and regulator capabilities
- Ethics in FinTech Governance
 - Ethical principles: fairness, accountability, transparency
 - Ethical concerns in AI-driven financial decision-making
 - Responsible innovation and ESG considerations in FinTech
- Future of FinTech regulation: harmonization and global standards.

Suggested Readings

- Pranay Gupta (2023), *FinTech: The New DNA of Financial Services*, Wiley India Pvt. Ltd., New Delhi.
- Chris Brummer (2020), *Fintech Law in a Nutshell*, West Academic Publishing, St. Paul.
- Douglas W. Arner, Ross P. Buckley & Dirk A. Zetsche (2019), *The RegTech Book: The Financial Technology Handbook for Investors, Entrepreneurs and Visionaries in Regulation*, Wiley, Chichester.
- A.C. Fernando (2022), *Business Ethics and Corporate Governance*, Pearson Education India, New Delhi.
- C.S.V. Murthy (2018), *Business Ethics*, Himalaya Publishing House, Mumbai.
- Alok Arora (2021), *Cyber Security and Cyber Laws*, McGraw Hill Education India, New Delhi.
- Pavan Duggal (2022), *Cyber Law in India*, Saakshar Law Publications, New Delhi.
- Frederic S. Mishkin (2021), *Financial Markets and Institutions*, Pearson Education, Noida.
- Primavera De Filippi & Aaron Wright (2018), *Blockchain and the Law: The Rule of Code*, Harvard University Press, Cambridge.
- Kevin Werbach (2018), *The Blockchain and the New Architecture of Trust*, MIT Press, Cambridge.

FT1 - Artificial Intelligence (AI) & Machine Learning (ML) for Finance

Course Objectives

- To introduce students to the fundamentals of **AI and Machine Learning** and their applications in financial services.
- To understand how AI techniques can improve financial decision-making and risk management.
- To develop practical knowledge of financial data analysis using machine learning tools.
- To explore AI-driven innovations in banking, trading, and investment management.
- To build awareness about ethical, regulatory, and operational challenges in AI-based financial systems.

Course Outcomes

- Understand key concepts of Artificial Intelligence and Machine Learning in financial contexts.
- Apply machine learning techniques for financial forecasting and risk analysis.
- Analyze financial datasets using programming tools and ML models.
- Evaluate the role of AI in investment management, fraud detection, and credit scoring.
- Understand emerging AI innovations transforming financial markets.

Content

Unit I:	Introduction to Artificial Intelligence in Finance, Evolution of AI in financial services, Basics of Artificial Intelligence and Machine Learning, Types of machine learning: supervised, unsupervised, reinforcement learning, Applications of AI in banking, insurance, and investment, AI adoption in global financial institutions
Unit II:	Financial Data and Machine Learning Tools- Financial data sources and datasets, Data preprocessing and feature engineering, Introduction to programming tools, Data analysis libraries, Data visualization for financial analytics
Unit III:	Machine Learning Models for Finance, Regression models for financial forecasting, Classification models for credit scoring, Decision trees and random forests, Clustering techniques for customer segmentation, Introduction to neural networks in finance.
Unit IV:	AI Applications in Financial Services, Algorithmic trading and automated investment strategies, Fraud detection and risk analytics, Credit risk assessment using ML models, Robo-advisory platforms and automated portfolio management, AI in digital banking and FinTech platforms

Unit V: Emerging Trends and Ethical Issues, AI in financial markets and trading systems, Blockchain and AI integration, Ethical concerns in AI-driven financial systems, Regulatory considerations and compliance, Future of AI in financial services

Suggested Readings

1. Machine Learning for Finance, Jannes Klaas, **Machine Learning for Finance**, Packt Publishing.
2. Artificial Intelligence in Finance, Yves Hilpisch, **Artificial Intelligence in Finance**, O'Reilly Media.
3. Python for Finance, Yves Hilpisch, **Python for Finance**, 2nd Edition, O'Reilly Media.
4. Hands-On Machine Learning with Scikit-Learn, Keras, and TensorFlow Aurélien Géron, O'Reilly Media.
5. Advances in Financial Machine Learning, Marcos López de Prado, Wiley.

FT2 - ANALYTICS FOR FINANCE

Course Objectives

- To introduce students to analytical techniques used in modern financial decision making.
- To develop skills for analyzing financial datasets using statistical and computational tools.
- To understand the application of data analytics in investment, risk management, and financial forecasting.
- To familiarize students with financial analytics tools and platforms used in the FinTech industry.
- To enable students to interpret financial data and derive insights for strategic financial decisions.

Course Outcomes

- Understand the role of Financial Analytics in modern financial management.
- Analyze financial data using analytical tools and statistical methods.
- Apply data analytics techniques to financial forecasting and risk assessment.
- Interpret financial market data and generate insights for investment decisions.
- Understand how analytics supports decision-making in banking, investment, and FinTech sectors.

Unit I:	Introduction to Financial Analytics-Meaning and scope of financial analytics, Role of analytics in financial decision making, Types of analytics: descriptive, predictive, and prescriptive analytics, Sources of financial data, Financial data structures and datasets
Unit II:	Financial Data Management and Tools- Data collection and preprocessing techniques, Data cleaning and transformation, Introduction to analytical tools, Financial data manipulation, Numerical computing using NumPy
Unit III:	Statistical Techniques for Financial Analysis-Descriptive statistics in finance, Probability distributions in financial markets, Correlation and regression analysis, Time series analysis in financial data, Forecasting financial variables
Unit IV:	Applications of Analytics in Finance- Investment analytics and portfolio analysis, Risk analytics and financial risk management, Credit scoring and default prediction, Fraud detection in financial transactions, Customer analytics in banking and financial services
Unit V:	Advanced Financial Analytics and Emerging Trends, Predictive analytics in stock market forecasting, Algorithmic trading and quantitative strategies Big data analytics in finance, Artificial intelligence applications in financial analytics, Ethical and regulatory considerations in financial data analytics

Suggested Readings

1. Python for Finance, Yves Hilpisch, **Python for Finance**, 2nd Edition, O'Reilly Media.
2. Machine Learning for Finance, Jannes Klaas, **Machine Learning for Finance**, Packt Publishing.
3. Advances in Financial Machine Learning, Marcos López de Prado, Wiley.
4. Business Analytics, James R. Evans, **Business Analytics**, Pearson Education.
5. Financial Analytics with R, Mark Bennett & Dirk Hugen, Wiley.

FT3 - CYBER SECURITY IN FINTECH

Course Objectives

- To provide an understanding of cyber-security concepts and their importance in financial technology systems.
- To examine cyber threats and vulnerabilities in digital financial services.
- To familiarize students with security mechanisms used in FinTech platforms.
- To develop awareness about regulatory frameworks and compliance in cybersecurity.
- To understand risk management and data protection strategies in financial institutions.

Course Outcomes

- Understand the importance of cybersecurity in the FinTech ecosystem.
- Identify major cyber threats affecting digital banking and financial platforms.
- Analyze security mechanisms used in protecting financial transactions.
- Evaluate cybersecurity policies and regulatory frameworks in financial services.
- Apply risk management practices to mitigate cyber threats in FinTech operations.

Unit I:	Introduction to Cyber Security in Financial Technology-Meaning and importance of cybersecurity, Overview of Financial Technology and digital financial services, Cybersecurity challenges in financial institutions, Digital payment systems and security concerns, Cybersecurity frameworks for financial systems
Unit II:	Cyber Threats and Vulnerabilities in FinTech, Types of cyber threats: malware, phishing, ransomware, Identity theft and financial fraud, Cyber attacks on banking and payment systems, Insider threats and system vulnerabilities, Risk assessment and threat identification, Digital Arrest.
Unit III:	Security Technologies in FinTech- Encryption and authentication techniques, Network security and firewalls, Multi-factor authentication and biometric security, Blockchain-based security in financial systems, Secure payment technologies and transaction protection.
Unit IV:	Cybersecurity Regulations and Compliance, Regulatory frameworks for cybersecurity in financial services, Role of Reserve Bank of India in digital payment security, Role of Securities and Exchange Board of India in market security, Data protection and privacy laws, Cybersecurity governance and compliance standards
Unit IV:	Cyber Risk Management in FinTech- Cyber risk management strategies, Incident response and recovery planning, Cybersecurity auditing and monitoring, Emerging trends in cybersecurity for financial institutions, Ethical issues and future challenges in FinTech security

Suggested Readings

1. Cyber Security, Nina Godbole & Sunit Belapure, **Cyber Security**, Wiley India Pvt. Ltd., New Delhi.
2. Information Systems Security, Nina Godbole, **Information Systems Security**, Wiley India Pvt. Ltd.
3. Cyber Security and Cyber Laws, Alok Arora, **Cyber Security and Cyber Laws**, McGraw Hill Education India.
4. Information Security Principles and Practice, Mark Stamp, **Information Security: Principles and Practice**, Wiley India.
5. Fundamentals of Cyber Security, Anand Shinde, **Fundamentals of Cyber Security**, Notion Press India.

FT4 - ALGORITHMIC TRADING

Course Objectives

1. To introduce students to the concepts and strategies of Algorithmic Trading in financial markets.
2. To understand how technology and data analytics are used to design automated trading systems.
3. To develop knowledge of trading algorithms and quantitative strategies.
4. To familiarize students with programming tools used in algorithmic trading.
5. To understand regulatory and risk management aspects of automated trading.

Course Outcomes

1. Understand the functioning and importance of algorithmic trading in financial markets.
2. Analyze financial market data for developing trading strategies.
3. Apply basic quantitative and algorithmic trading models.
4. Evaluate the risks and regulatory frameworks associated with automated trading systems.
5. Understand the technological infrastructure used in modern trading platforms.

Unit I:	Introduction to Algorithmic Trading - Meaning and evolution of algorithmic trading , Role of technology in financial markets, Structure of electronic trading systems, Market participants and automated trading, Role of exchanges such as National Stock Exchange of India and Bombay Stock Exchange in algorithmic trading
Unit II:	Financial Market Data and Trading Infrastructure, Types of financial market data, Market microstructure and order types, Electronic trading platforms and APIs, Data sources and market information systems, Basics of quantitative trading systems
Unit III:	Algorithmic Trading Strategies-Trend-following strategies, Mean reversion strategies, Arbitrage strategies, Momentum-based trading, High-frequency trading concepts
Unit IV:	Programming and Tools for Algorithmic Trading Introduction to programming languages used in trading such as Python, Financial data analysis, Back testing trading strategies, Risk management in algorithmic trading, Performance evaluation of trading algorithms
Unit V:	Regulation, Risks and Future Trends, Market risks and operational risks in algorithmic trading, Ethical issues and market manipulation concerns, Regulatory framework for automated trading, Role of Securities and Exchange Board of India in regulating algorithmic trading, Future trends in algorithmic and AI-driven trading.

Suggested Readings

1. Algorithmic Trading and DMA, Barry Johnson, **Algorithmic Trading and DMA**, Wiley India Pvt. Ltd., New Delhi.
2. Quantitative Trading, Ernest P. Chan, **Quantitative Trading**, Wiley India.
3. Python for Finance, Yves Hilpisch, **Python for Finance**, O'Reilly / Wiley India distribution.
4. Advances in Financial Machine Learning, Marcos López de Prado, Wiley India.
5. Investment Analysis and Portfolio Management, Prasanna Chandra, **Investment Analysis and Portfolio Management**, McGraw Hill Education India.

FT5- Blockchain & Digital Currencies

Course Objectives

- To introduce students to the fundamentals of blockchain technology and its applications in financial systems.
- To understand the structure and functioning of digital currencies and crypto assets.
- To explore the role of blockchain in financial innovation and FinTech ecosystems.
- To analyze the regulatory and security challenges associated with digital currencies.
- To examine the future potential of blockchain technology in financial services and digital economies.

Course Outcomes

- Understand the concept and functioning of Blockchain and its role in financial systems.
- Explain the working mechanism of digital currencies such as Bitcoin.
- Evaluate blockchain applications in banking, payments, and financial services.
- Analyze regulatory frameworks and risks associated with digital currencies.
- Understand emerging trends in decentralized finance and blockchain-based innovations.

Content

Unit I:	Introduction to Blockchain Technology- Meaning and evolution of blockchain technology, Distributed ledger technology and decentralization, Components of blockchain architecture, Public, private, and consortium blockchains, Applications of blockchain in financial systems
Unit II:	Cryptocurrencies and Digital Assets- Concept and characteristics of cryptocurrencies, Working mechanism of digital currencies, Mining, wallets, and crypto exchanges, Major cryptocurrencies and token systems. Advantages and limitations of cryptocurrencies
Unit 3:	Blockchain Applications in Finance-Blockchain in banking and payment systems, Smart contracts and decentralized applications, Cross-border payments and remittances, Blockchain in financial record management, Role of blockchain in financial inclusion
Unit 4:	Regulation, Security and Risks- Regulatory issues in cryptocurrency markets, Role of regulatory bodies such as Reserve Bank of India and Securities and Exchange Board of India, Cybersecurity challenges in blockchain systems, Financial risks and market volatility, Legal and ethical issues in digital currencies
Unit 5:	Emerging Trends in Blockchain and Digital Finance- Central Bank Digital Currencies (CBDC), Decentralized Finance (DeFi), Tokenization of assets, Blockchain adoption in global financial markets, Future of blockchain and digital currency ecosystems.

Suggested Readings

1. Blockchain Basics, Daniel Drescher, **Blockchain Basics**, Wiley India Pvt. Ltd., New Delhi.
2. Blockchain Revolution, Don Tapscott & Alex Tapscott, **Blockchain Revolution**, Penguin Random House India.
3. Blockchain Technology, S. Shanmugam, **Blockchain Technology**, Wiley India.
4. Mastering Blockchain, Imran Bashir, **Mastering Blockchain**, Packt Publishing
5. FinTech, Pranay Gupta, **FinTech: The New DNA of Financial Services**, Wiley India.

FT6 - DIGITAL BANKING & FINTECH PRODUCT MANAGEMENT

Course Objectives

- Understand the evolution and architecture of digital banking ecosystems
- Develop skills to design, launch, and scale Fintech products
- Apply product management frameworks in financial services
- Analyze customer behavior, UX, and engagement in digital finance
- Evaluate emerging models such as neobanks, BNPL, and embedded finance

Course Outcomes

- Design digital financial products aligned with market needs
- Apply product lifecycle management in FinTech contexts
- Evaluate digital banking business models and revenue streams
- Integrate UX, data, and compliance into product decisions
- Develop go-to-market strategies for FinTech solutions

Content

- Unit 1:** **Digital Banking Ecosystem:-** Evolution: Traditional → Digital → Neobanks , Digital banking architecture , Payment systems (UPI, wallets) , Regulatory landscape in India
- Unit 2:** **FinTech Business Models-** Payments, lending, wealthtech, insurtech , BNPL and embedded finance, Revenue models & unit economics
- Unit 3:** **Product Management in FinTech-** Product lifecycle (Ideation → MVP → Scale), Agile & Scrum methodologies , Product-market fit
- Unit 4:** **Customer Experience & Growth Strategy-** UX design in financial products, Behavioral finance & trust building, Customer acquisition, retention, and pricing strategies
- Unit 5:** **Infrastructure & Risk -** Payment infrastructure & APIs , Open banking systems, KYC, AML, compliance integration.

Suggested Readings

1. Digital Bank — *Marshall Cavendish Business*
2. Bank 4.0 — *Marshall Cavendish International*
3. The Lean Product Playbook — *Wiley*
4. Inspired: How to Create Tech Products Customers Love — *SVPG Press*
5. The PayTech Book — *Wiley*

FT7 : Financial Data Engineering & Big Data Systems

Course Objectives

- Understand data architecture in financial systems
- Build capabilities in handling large-scale financial datasets
- Learn real-time data processing and cloud-based systems
- Apply big data tools to financial decision-making
- Bridge the gap between analytics models and production systems

Course Outcomes

- Design scalable data pipelines for financial applications
- Apply big data tools in financial analytics and trading systems
- Manage real-time transaction data systems
- Evaluate cloud-based financial data architectures
- Integrate AI/ML models into production environments

Content

- Unit 1:** **Financial Data & Systems Overview-** Types of financial data (market, transactional, alternative), Structured vs unstructured data, Introduction to financial data ecosystems
- Unit 2:** **Data Engineering Fundamentals-**ETL processes- Data pipelines & workflows- Data quality, governance, and storage systems
- Unit 3:** **Big Data Technologies-** Hadoop ecosystem, Apache Spark for finance, Distributed computing concepts
- Unit 4:** **Real-Time & Cloud Data Systems-** Streaming data (Kafka basics), Real-time, analytics & fraud detection, Cloud computing (AWS/GCP), data lakes & warehouses
- Unit 5:** **APIs, Security** - APIs and open banking infrastructure, Data security, encryption, privacy laws, Risk in financial data systems, Financial data pipeline

Suggested Readings

1. Designing Data-Intensive Applications — *O'Reilly Media*
2. Streaming Systems — *O'Reilly Media*
3. Data Engineering with Python — *Packt Publishing*
4. Big Data — *Houghton Mifflin Harcourt*
5. Python for Finance — *O'Reill*

FT8 : LEGAL ASPECTS OF FINTECH

Course Objective

- To provide a structured understanding of legal issues arising from technology-driven financial systems.
- To develop analytical and drafting skills in technology and FinTech transactions.
- To examine private law, contractual, and technological dimensions of digital platforms and financial innovation.

Course Learning Outcomes

- Explain the evolution and scope of technology law and its interaction with financial systems.
- Analyse legal risks and contractual structures in FinTech and digital platforms.
- Evaluate legal issues relating to digital assets, blockchain, and decentralized systems.
- Apply principles of intellectual property and licensing in technology transactions.
- Develop drafting skills for digital agreements, platform governance, and FinTech transactions.

UNIT 1: Foundations of Technology Law and Digital Ecosystem: -

- Overview of technology law: evolution, scope, and regulatory landscape
- Understanding the Indian legal framework governing technology: Information Technology Act, 2000 and allied rules (conceptual overview)
- Jurisdictional issues in technology-related disputes (territoriality vs borderless digital environment)
- Key stakeholders: intermediaries, platforms, users, developers, and state authorities
- Legal issues in decentralization, smart contracts, and DAOs
- Recent developments and case studies in technology law

UNIT 2: FinTech Business and Legal Risk Framework:-

- Overview and evolution of FinTech
- Technology drivers: AI, blockchain, APIs, big data, cloud computing
- Key segments: PayTech, LendTech, WealthTech, InsurTech
- Institutional framework of Regulatory Sandboxed
 - Reserve Bank of India
 - Securities and Exchange Board of India
 - Insurance Regulatory and Development Authority
 - Ministry of Finance
- Regulation of Fintech under RBI Act 1934 and Banking Regulation Act, 1949
- Payment and Settlement Systems Act, 2007, Licensing regime under PA Guidelines 2020.
- SEBI Act 1992 Wealthtech Intermediaries Regulation
- IRDAI (Insurance Web Aggregators) Regulations, 2017

- Legal risks in FinTech:
 - Contractual and transactional risks
 - Cybersecurity and fraud
 - Data and privacy concerns
 - Consumer protection issues
- Future of FinTech: embedded finance, platform economy, DeFi

UNIT 3: E-Commerce Law, Intermediary Liability, and Digital Contracting: -

- Legal framework for e-commerce and validity of electronic contracts
- Intermediary liability and safe harbour principles under the Information Technology Act, 2000
- Platform governance and due diligence (conceptual understanding)
- Digital Lending Guidelines 2022, Peer-to-Peer Lending Regulation
- Consumer Protection Act, 2019.
- Protection of software, algorithms, and digital content

UNIT 4: Cross-Border Payments, AML, and FDI in Fintech:

- Cross-Border Payment Aggregators Guidelines, Oct 2023,
- Liberalised Remittance Scheme in Fintech,
- Bilateral initiatives: UAE, UK, Bhutan, Nepal, Namibia, Peru, ASEAN
- FEMA considerations for cross-border UPI and FDI in Fintech Industry.

UNIT 5: Emerging Frontiers – Blockchain, AI, RegTech, and Future Reforms

- Virtual Digital Assets,
- ICOs and token offering
- Virtual Asset Exchanges
- Digital lending and crowdfunding, CBDC (Digital Rupee)
- Non-Fungible Tokens (NFTs) RBI FREE-AI Framework,
- InsurTech, Regtech and SEBI regulations on Finfluencers.

Suggested Readings

- Nishith Desai Associates -- Fintech: Legal, Regulatory and Tax Considerations (Compendium, April 2025)
- Madhuri Parikh & Amit Kumar Kashyap -- Corporate Law & Finance: Emerging Legal Aspects (Bloomsbury, 2025)
- Joy Bose -- Artificial Intelligence and Financial Law in India (Thomson Reuters, 2025)
- Chris Brummer -- Fintech Law in a Nutshell (West Academic Publishing, 2020)