

H. L. College of Commerce (Autonomous)

Self-Financed Programmes

B. S. Fintech Syllabus

COURSE: DIGITAL BANKING

Sem: 3	Course Code:	Course Title: Digital Banking
Credits: 4	FTM205-2C	Course Category: Major Course

Course Objective: The objective of this course is to equip students with a comprehensive understanding of digital payment systems, FinTech-driven lending models, blockchain applications in banking, regulatory frameworks, and cybersecurity essentials in the Indian digital banking landscape. The course offers practical insights into systems like UPI, BBPS, NEFT, and RTGS; innovations such as CBDC, DeFi, and digital wallets; as well as risk mitigation strategies through AI, biometric authentication, and data privacy norms. By the end of the course, students will be able to critically evaluate India's digital financial infrastructure and anticipate emerging technologies in digital banking.

Course Outcomes: Upon successful completion of this course, students will be able to:

CO	Cognitive Abilities	Course Outcomes
CO1	Remembering	Remember key components of digital payment systems, prepaid instruments, RBI's digital lending guidelines, and types of cyber threats in digital banking.
CO2	Understanding	Understand the functioning of digital lending models (P2P, BNPL), blockchain and CBDC applications in banking, and AI-driven tools for fraud detection and credit scoring.
CO3	Applying	Apply the application of e-KYC, tokenization, and India Stack in digital banking, and the use of AI/ML in financial services like lending and personalization.
CO4	Analyzing	Analyze the cybersecurity risks, regulatory mechanisms, and the architecture of systems like UPI and Bharat QR to ensure secure digital transactions.
CO5	Evaluating	Evaluate emerging innovations like voice banking, Web3, OCEN, and sustainable finance to assess their potential impact on the future of digital banking in India.

Course Content

Unit No.	Unit Contents	Sessions Allotted
1	Digital Payment Systems in India - Digital Payments & Payment Systems in India - Overview of Payment Systems: CTS, NFS, NEFT, RTGS, IMPS, UPI, BBPS - Unified Payments Interface (UPI) - Architecture, Growth, and Future Trends, Bharat QR, UPI QR. - Prepaid Payment Instruments (PPIs) - Wallets, Cards, FASTags - Bharat Bill Payment System (BBPS) & National Electronic Toll Collection (NETC) - RBI's Regulatory Framework for Digital Payments (PAYGOV, OTP, Tokenization)	
2	FinTech & Digital Lending in India - FinTech Ecosystem in India (Payments, Lending, Insur-Tech, Wealth-Tech) - Digital Lending Models (P2P Lending, BNPL, Instant Loans via Apps) - RBI's Digital Lending Guidelines (2022) - Fair Practices, Data Privacy - Role of AI & ML in Credit Scoring (CRED, BharatPe, KreditBee) Case Study: RBI's Sandbox Approach for FinTech Innovation	12
3	Blockchain, CBDC & Cryptocurrency in Banking: - Blockchain Technology in Banking (Smart Contracts, Trade Finance) - Central Bank Digital Currency (CBDC) - Digital Rupee (₹) Pilot by RBI - Cryptocurrency Regulations in India (Taxation, RBI's Stance) - Web3 & Decentralized Finance (DeFi) Opportunities in India Case Study: India's Digital Rupee (Wholesale & Retail Pilot Phases)	12
4	Cybersecurity & Fraud Management in Digital Banking - Cyber Threats in Digital Banking (Phishing, SIM Swap, UPI Frauds) - Importance of Cybersecurity in Digital Banking: Protecting sensitive data, preventing financial losses, maintaining customer trust, regulatory compliance. - RBI's Cyber Security Framework & Measures for Banks - Biometric Authentication, AI-based Fraud Detection, Behavioural biometrics & Anomaly Detection. - Data Privacy Laws (DPDP Act 2023, RBI's Data Localization Norms) Case Study: NPCI's Fraud Risk Management in UPI	12
5	Future Trends & Innovations in Digital Banking - Hyper-Personalization using AI & Big Data Analytics - Voice Banking & Conversational AI (Chatbots, Alexa Banking) - 5G & IoT in Banking (Smart ATMs, Wearable Payments) - Sustainable Banking & Green Digital Finance	12

Unit No.	Unit Contents	Sessions Allotted
	Case Study: Open Credit Enablement Network (OCEN)	

Recommended Reading:

1. Reference Books:

1. The Power of Mobile Banking: How to Profit from Revolution in Retail Financial Services, by Sankar Krishan
2. The PAYTECH Book: The Payment Technology Handbook for Investors, Entrepreneurs, and FinTech Visionaries, by Susanne Chishti, Tony Craddock, Robert Courtneidge, and Markos Zachariadis
3. Bank 4.0: Banking Everywhere, Never at a Bank, by Brett King
4. Retail and Digital Banking (principles And Practice), by (Author) Henderson, John

2. Assessment Techniques:

1. Class participation, discussions and attendance
2. MCQs / Quizzes
3. Assignment project for real-world application of the learnings