

COURSE TITLE	IT IN FINANCIAL SERVICES - II
COURSE CODE	04BC0255
COURSE CREDITS	2

Course Outcomes: After completion of this course, student will be able to:

- 1 Apply key concepts of FinTech, digital banking, and real-time payment systems to evaluate modern financial transaction processes.
- 2 Analyze the role of emerging technologies in transforming financial services and digital payments.
- 3 Evaluate cybersecurity risks, fraud detection mechanisms, and RegTech applications to determine effective strategies for secure digital financial operations.
- 4 Analyze IT applications, Core Banking Solutions, algorithmic trading, robo-advisors, and digital lending models to assess their impact on financial decision-making and risk management.
- 5 Evaluate real-world case studies on digital payment assessment to derive insights on innovation and technology adoption in the financial sector.

Pre-requisite of course: Basic knowledge of MS office

Teaching and Examination Scheme

Theory Hours	Tutorial Hours	Practical Hours	ESE	IA	CSE	Viva	Term Work
0	0	4	0	30	20	0	50

Contents : Unit	Topics	Contact Hours
Total Hours		

Suggested List of Experiments:

Contents : Unit	Topics	Contact Hours
1	FinTech & Digital Payments Overview of FinTech Industry & Its Evolution, Digital Banking & Mobile Payment Ecosystems, UPI, NEFT, RTGS, IMPS – Real-time Payment Systems, Blockchain & Cryptocurrencies in Financial Services, Artificial Intelligence & Big Data in Banking, Cybersecurity Risks in Online Banking, Cloud Computing in Financial Transactions, Case Study: Paytm & the Digital Payment Revolution	30

Suggested List of Experiments:

Contents : Unit	Topics	Contact Hours
2	IT Applications in Finance & Risk Management Core Banking Solutions (CBS) & Its Role, Algorithmic Trading & High-Frequency Trading (HFT), Robo-Advisors & Automated Wealth Management, RegTech – Technology for Regulatory Compliance, Risk Management Tools in Banking & Insurance, Role of AI in Fraud Detection & Prevention, Digital Lending & Alternative Credit Scoring, Case Study: How AI is Transforming Credit Risk Assessment	30
Total Hours		60

Textbook :

- Digital Payments in India, R. K. Gupta, Academic Press, 2023
- FinTech: The New DNA of Financial Services, Parag K. Garg, Wiley India, 2022

References:

- Blockchain and the Law: The Rule of Code, Blockchain and the Law: The Rule of Code, Primavera De Filippi, Aaron Wright, Harvard University Press, 2023
- Financial Technologies in Banking & Payments, Financial Technologies in Banking & Payments, R. K. Sharma, Routledge India, 2022
- Understanding Blockchain Technology and Applications, Understanding Blockchain Technology and Applications, Rajeev P., Springer, 2024

Suggested Theory Distribution:

The suggested theory distribution as per Bloom's taxonomy is as follows. This distribution serves as guidelines for teachers and students to achieve effective teaching-learning process

Distribution of Theory for course delivery					
Remember / Knowledge	Understand	Apply	Analyze	Evaluate	Higher order Thinking / Creative
10.00	15.00	25.00	25.00	25.00	0.00

Instructional Method:

- Practicals & PPT

Supplementary Resources:

- <https://www.ibm.com/think/topics/digital-transformation-banking>
- <https://www.oneadvanced.com/resources/the-role-of-technology-in-the-finance-industry/>
- <https://motivitylabs.com/how-ai-and-big-data-analytics-are-transforming-banking/>
- <https://www.wipro.com/banking/banking-on-analytics/>
- https://icmai.in/upload/BI/BFSI_CHRONICLE_13th_EDITION.pdf

Supplementary Resources:

- 6 <https://www.idrbt.ac.in/wp-content/uploads/2022/05/IJBT-2.pdf>
- 7 <https://www.ecb.europa.eu/pub/pdf/scpwps/ecb.wp2956~2d6075a710.en.pdf>