

I. APPLIED FINTECH FOR BUSINESS

INTRODUCTION TO BFSI

Module 1

- BFSI Value chain
- How FinTech changed BFSI
- Modern Banking Landscape
- Introduction to BankTech
- Introduction to InsureTech

FINTECH PRIMER

Module 2

- Introduction to the Fintech landscape
- FinTech Architecture
- FinTech Technologies
- Latest Trends and future of FinTech
- Applications of FinTech
- Use cases of FinTech in banks
- Fintech startups
- Fintech unicorns and business models

MACHINE LEARNING & AI

Module 3

- Introduction to Machine Learning
- ML Algorithms and applications
- AI and applications
- AI/ML –changing business landscape
- AI/ML –in practice
- Use cases and applications

Module 4

- Introduction to Cloud Computing
- Cloud Computing Architecture
- Technologies for Cloud
- Building Robust, Secure & Scalable APIs
- API Economy, Open APIs & Connected Businesses
- Use cases

II. BLOCKCHAIN FOR FINTECH & APPLICATIONS

BLOCKCHAIN TECHNOLOGY AND INFRASTRUCTURE

Module 5

- Blockchain Foundations
- Blocks and Blockchain, the Chain, Nodes and Network
- Blockchain in Use
- Trust Framework and Consensus Mechanisms, Public, Consortium, Private Blockchains, Blockchain Interoperability

BLOCKCHAIN AND CRYPTOGRAPHY

Module 6

- Cryptography
- Application to Blockchain
- Hash Functions
- Public Key Cryptography and Signing
- Use cases and applications

SMART CONTRACTS AND HYPERLEDGERS

Module 7

- Understand smart contracts
- Computational model of Smart contracts
- Ethereum and Working with Smart Contracts
- Hyperledger Architecture
- Hyperledger Blockchain Technology
- Use cases of Smart contracts

APPLICATIONS OF BLOCKCHAIN ARCHITECTURE

Module 8

- Setting up a Private Blockchain Environment
- Blockchain and Bitcoin
- Example Blockchain Networks and Use Cases
- Practical Blockchain Architecture and use-cases

III. PAYMENTS, CRYPTO-CURRENCIES & ALTERNATIVE FINANCE

CRYPTO-CURRENCIES AND ICOs

Module 9

- Cryptocurrencies Primer
- Bitcoin and Applications
- Cryptocurrencies and Digital Crypto Wallets
- Types of Cryptocurrencies
- Cryptocurrencies and Applications
- What is an ICO?
- Importance of ICO in Alternative Finance
- Regulations for Cryptos and tokens

PAYMENTS -ARCHITECTURE AND TECHNOLOGIES

Module 10

- Global Payment Ecosystem
- Payments Architecture and Setup
- Innovation in Consumer and Retail payments
- Popular Payments Technology
- Blockchain and Cryptocurrencies in Payments
- Payment Stacks in India
- B2B & B2B2C solutions
- Innovative Products in Mobile based, Credit Cards, POS based ecosystem

P2P LENDING, CROWD-FUNDING AND INFRASTRUCTURE

Module 11

- Concept of P2P Lending
- P2P and Marketplace Lending
- P2P Infrastructure and technologies
- Concept of Crowdfunding
- Crowdfunding Architecture and Technology
- P2P and Crowdfunding unicorns and business models
- SME/MSME Lending: Unique opportunities and Challenges, Solutions and Innovations

IV. BANKTECH,INSURTECH & REGTECH

BANKTECH

Module 12

- Regulatory Framework for Product Pricing, loan origination and servicing
- Social media-based profiling, comparison tools and aggregators
- Dynamic credit rating, Risk management & underwriting
- Using Credit Counsellor Robo/Bot for faster approvals & funding
- Utilizing data science tools and machine learning for data mining/ cross sale
- Hybrid Lending Products

INSURTECH

Module 13

- How does InsurTechwork
- Business model disruption
- Aggregators
- AI/ML in InsurTech
- IoT and InsurTech
- Risk Modeling
- Fraud Detection
- Processing claims and Underwriting
- Innovations in Insurance Services
- Unicorns and business models

REGTECH

Module 14

- Evolution of RegTech
- RegTechEcosystem: Financial Institutions
- RegTechEcosystem: Startups
- Ensuring Compliance from the Start: Suitability and Funds
- RegTechStartups: Challenges
- RegTechEcosystem: Regulators
- Use Case of AI in Smart Regulation and Fraud Detection
- Regulatory Sandboxes
- Smart Regulation

V. FINTECH FOR CAPITAL MARKETS

DISCOUNT BROKING

Module 15

- Discount Broking
- Disruption to Broking model
- Core Services and Busines model
- Technology setup
- Unicorns of Discount Broking and business models
- Technology stacks for Discount Brokers
- How can they improve
- Other differentiated offerings and services

ALGORITHMIC TRADING

Module 16

- Architecture of Algorithmic Trading
- Lifecycle of Algorithmic Trading
- Risk, Costs and Roles in Algorithmic Trading
- Conceptualization and Backtesting Strategies
- Business aspects of FinTech in Capital Markets
- Fund Management and Algorithmic Trading
- Setting up an Algo bot

ROBO-ADVISORY

Module 17

- Robo Advisory
- Automating Investment rules
- ML/AI in Robo-advisory
- Robo-advisory Platforms and Architecture
- Building a Robo Advisory Platform
- Unicorns of Robo-advisory and business models
- State of Robo-advisory in India