



Indian Institute Of Management Kashipur (IIM Kashipur)

Member of AACSB

Executive Programme for AI in Fintech

Type

Executive Program

Mode

Online

Duration

7 Months

Total fees

₹ 81,000

Indian Institute Of Management Kashipur (IIM Kashipur)

Established in 2011 by the Government of India, the Indian Institute of Management Kashipur is a second-generation IIM committed to excellence in management education. Guided by the values of collegiality, transparency, sustainability and stakeholder engagement, the institute fosters academic excellence, research and innovation. Through strong industry collaboration and a future-focused approach, IIM Kashipur develops responsible leaders equipped to address evolving business and societal challenges.

Executive Programme for AI in Fintech

Highlights

- ◆ Build expertise at the intersection of Artificial Intelligence, FinTech and financial analytics.
- ◆ Learn through real-world applications including credit scoring, fraud detection, portfolio optimisation and financial forecasting.
- ◆ Gain hands-on experience with financial datasets, AI tools and machine learning models.
- ◆ Apply learning through practical labs and an industry-relevant capstone project.
- ◆ Participate in a two-day campus immersion and earn a prestigious certificate from IIM Kashipur.

Learning outcomes

- ◆ Apply AI and machine learning techniques to solve real-world financial and FinTech challenges.
- ◆ Analyse financial datasets to support data-driven decision-making and predictive modelling.
- ◆ Evaluate AI applications across lending, risk management, trading, compliance and digital payments.
- ◆ Build practical AI-enabled solutions for forecasting, fraud detection and portfolio optimisation.
- ◆ Integrate emerging technologies such as blockchain, Generative AI and data analytics into modern financial ecosystems.

Eligibility Criteria

Any graduate with 2 years of work experience

Curriculum Overview

Module I: Foundations of FinTech & Intelligent Financial Systems (14 subjects)

- ◆ The evolution of FinTech
- ◆ FinTech Business Model Categories: Payments
- ◆ Lending
- ◆ WealthTech
- ◆ InsurTech
- ◆ RegTech
- ◆ Revenue Models in Fintech: Paytm and Zerodha Cases
- ◆ Mapping FinTech Opportunities: India Stack as a Startup Platform
- ◆ Core concepts in financial markets
- ◆ risk
- ◆ and credit
- ◆ Introduction to financial datasets: security prices
- ◆ credit ratings
- ◆ market data



Curriculum Overview (continued)

Module II: Fintech Concepts and Blockchain (15 subjects)

- ◆ Role of NPCI (National Payments Corporation of India): UPI
- ◆ IMPS
- ◆ Mobile Wallets
- ◆ Payment Gateways and Payment Aggregators: Transactions
- ◆ Tokenization
- ◆ Recurring Payments: Risk
- ◆ Fraud & Failure Scenarios in Recurring Payments
- ◆ Blockchain and how does it work: When does/does not Blockchain make sense?
- ◆ Consensus Mechanisms: PoW and PoS
- ◆ Blockchain Architecture
- ◆ Smart Contracts
- ◆ Public vs. Private vs. Consortium Blockchains
- ◆ Decentralized Finance (DeFi): Decentralized Exchanges (DEXs)
- ◆ AMMs
- ◆ Decentralized Lending & Over-Collateralization

Module III: Data Exploration & Visualization for Financial Insights (8 subjects)

- ◆ Introduction to Python
- ◆ Exploratory Data Analysis (EDA) for structured & unstructured finance data
- ◆ Data preprocessing: Cleaning
- ◆ normalization
- ◆ and feature engineering for financial data.
- ◆ Visual storytelling with stock market
- ◆ credit bureau & bank datasets
- ◆ Hands-on lab: Creating a visual dashboard for financial data

Module IV: Machine Learning Models and Predictive Modeling for Credit & Risk Intelligence (Fintech Application) (13 subjects)

- ◆ Core ML algorithms: Regression and personal loans
- ◆ classification
- ◆ clustering
- ◆ Applications: Predictive modeling for stock prices and credit scoring
- ◆ Loan default prediction
- ◆ Risk analytics for SME lending
- ◆ credit cards
- ◆ Model tuning
- ◆ validation
- ◆ and bias detection in financial ML models
- ◆ Use-case lab: Build a regression model for stock price prediction
- ◆ Build and interpret a credit risk model using real data

Module V: Algorithmic Trading, WealthTech & Portfolio Analytics (7 subjects)

- ◆ Rule-based and ML-based trading strategies
- ◆ Backtesting trading signals using Python
- ◆ Portfolio optimization using Sharpe Ratio
- ◆ VaR
- ◆ and Monte Carlo
- ◆ Robo-advisory engines & personalization of wealth products
- ◆ Hands-on lab: Simulate and optimize a portfolio allocation strategy



Curriculum Overview (continued)

Module VI: AI models for forecasting (6 subjects)

- ◆ AI models for financial analytics: ANN
- ◆ RNN
- ◆ CNN
- ◆ Application in time series forecasting and credit scoring
- ◆ Evaluating model performance and inference
- ◆ Hands-on Lab: Train AI models for cryptocurrency price forecasting

Module VII: NLP, Deep Learning & Generative AI in Fintech and Finance (16 subjects)

- ◆ NLP basics: Tokenization
- ◆ sentiment analysis
- ◆ topic modeling
- ◆ Applications in Fintech: Sentiment analysis using news
- ◆ earnings transcripts
- ◆ and tweets
- ◆ Deep learning for time-series: stock movement prediction
- ◆ fraud detection
- ◆ GenAI use-cases: financial summarization
- ◆ Automating investment reports
- ◆ policy parsing
- ◆ and KYC
- ◆ GenAI: Prompt engineering for finance
- ◆ Risks of hallucination
- ◆ Use-case lab: Build an NLP model to perform sentiment analysis on financial news
- ◆ Compare LLM Output with Analysts Note



Curriculum Overview (continued)

Module VIII: Additional AI applications in FinTech (3 subjects)

- ◆ Fraud detection: Anomaly detection algorithms (Isolation forests)
 - ◆ Use-case lab: Fraud detection system using unsupervised learning
 - ◆ Regulatory tech (RegTech): AI for compliance
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Module IX: Capstone Project - Solving Real-World FinTech Challenges (5 subjects)

- ◆ Fraud Detection System for NBFCs
- ◆ Wealth Portfolio Optimizer with Predictive Rebalancing
- ◆ Personalized Investment Recommender
- ◆ Any other relevant project
- ◆ Loan Approval Automation Engine

Fee Structure

Fee heads	Amount
Program Fee	₹ 80,000
Application Fee	₹ 1,000
Total	₹ 81,000