



**SHAHEED SUKHDEV  
COLLEGE OF  
BUSINESS STUDIES**



# Shaheed Sukhdev College of Business Studies

University of Delhi

*Short-Duration Certificate Course*

## Certificate Programme in Applied FinTech & Artificial Intelligence (AFAI)

***Build • Analyse • Automate • Innovate***

[APPLICATION FORM](#)

### 1. Introduction

The convergence of finance, Artificial Intelligence, and digital public infrastructure is transforming financial services worldwide, and India sits at the centre of this shift. In May 2026, the Unified Payments Interface (UPI) processed a record 23.2 billion transactions worth approximately ₹29.9 lakh crore in a single month (NPCI), and UPI now accounts for roughly 85% of India's retail digital payments. India represents close to half of global real-time payment volumes, and the IMF has recognised UPI as the world's largest real-time payment system by transaction volume. India also ranks third globally in fintech market activity and funding (Global Fintech Index).

As a global FinTech leader, India requires future-ready professionals with practical expertise in digital finance, AI applications, data analytics, and technology-enabled financial innovation. Although students possess strong theoretical foundations in finance and management, a substantial gap persists between academic curricula and the rapidly evolving, AI-era skill requirements of the financial services industry. This programme is designed to close that gap.

### 2. Rationale

The rationale for introducing this programme rests on five major developments:

- **Digital transformation of financial services.** Banks, NBFCs, insurers and capital-market institutions are re-architecting products, distribution and operations around digital channels.
- **Rapid growth of India's FinTech ecosystem.** India Stack, UPI, Account Aggregator and ONDC have created the world's most advanced digital public infrastructure for finance, generating sustained demand for skilled talent.

- **AI-led transformation.** Generative and agentic AI are moving from experimentation to production across underwriting, research, compliance and customer engagement.
- **Employability.** Employers increasingly seek professionals who combine financial domain knowledge with practical AI and analytics capability — a combination in structurally short supply.
- **Entrepreneurship.** Low-cost AI and no-code tooling has sharply reduced the barrier to building financial products, creating opportunities for student-led ventures.

### 3. Vision

To develop future-ready finance professionals capable of leveraging Artificial Intelligence and emerging financial technologies to create innovative, ethical, and sustainable financial solutions.

### 4. Mission

- To provide experiential learning in FinTech and AI.
- To bridge the gap between academic learning and industry expectations.
- To promote innovation and entrepreneurship.
- To develop globally competitive financial professionals.

### 5. Objectives

The programme seeks to:

- Develop a comprehensive understanding of the contemporary FinTech ecosystem.
- Equip learners with practical knowledge of digital financial technologies.
- Introduce AI applications — discriminative, generative and agentic — in financial services.
- Develop analytical and problem-solving skills using modern analytics and visualisation tools.
- Familiarise participants with digital payments and banking technologies.
- Enable learners to understand blockchain, digital assets and tokenisation.
- Promote responsible AI and ethical financial innovation.
- Encourage FinTech entrepreneurship and develop industry-ready professionals.

### 6. Learning Outcomes

On successful completion of the programme, participants will be able to:

#### A. Knowledge

- K1. Explain the architecture of modern financial technologies and digital public infrastructure.
- K2. Understand digital payment systems and banking innovations.
- K3. Explain discriminative, generative and agentic AI applications in finance.
- K4. Understand blockchain, digital assets and tokenisation.

#### B. Skills

- S1. Analyse financial data and documents using AI tools.

- S2. Design digital financial solutions and customer journeys.
- S3. Build interactive financial dashboards.
- S4. Apply prompt engineering to finance workflows.
- S5. Evaluate FinTech business models.
- S6. Perform digital credit analysis and interpret scoring models.
- S7. Develop AI-assisted financial reports and research notes.
- S8. Build simple financial automation (agentic) workflows using no-code tools.

### C. Professional Competencies

Participants will demonstrate critical thinking, digital literacy, innovation, teamwork, problem-solving, ethical decision-making, and an entrepreneurial mindset.

## 7. Programme Highlights

- Industry-oriented curriculum with hands-on practical sessions and live case studies.
- AI-enabled finance applications, including a generative & agentic AI lab.
- Industry experts as guest faculty; financial analytics laboratories.
- Capstone project culminating in a Demo Day before an industry jury.
- Incubation / start-up mentoring at SIIF; internship assistance.
- Portfolio development and certificate upon successful completion.

## 8. Pedagogy: The 50–30–20 Learning Model

The programme follows an experiential learning approach structured around the 50–30–20 Learning Model:

- 20% Concepts — formal learning.
- 30% Case studies — social learning.
- 50% Hands-on labs, projects & simulations — experiential learning.

Participants finish the programme with a **portfolio of FinTech projects**, not just notes.

## 9. Duration

**Duration:** 90 hours = 60 hours (classroom & lab sessions with trainer) + 30 hours (capstone project / prototype development).

## 10. Mode & Programme Calendar

**Mode:** Offline, at the SSCBS Campus.

**Cadence:** Weekend format — Saturday and Sunday sessions of 4 hours each — spanning approximately 12 weeks (about one semester).

| Phase      | Activity                                                               | Weeks |
|------------|------------------------------------------------------------------------|-------|
| Weeks 1–10 | Theory & labs: 15 sessions × 4 hours (Modules 1–10), Saturday & Sunday | 8     |

| Phase       | Activity                                                                      | Weeks |
|-------------|-------------------------------------------------------------------------------|-------|
| Weeks 11–15 | Capstone: 4 supervised studio sessions (12 hrs) + mentored team work (16 hrs) | 3     |
| Week 16     | Demo Day: final presentations before industry jury (2 hrs) & valedictory      | 1     |

## 11. Target Participants, Eligibility & Admission

**Target participants:** Undergraduate & postgraduate students (any discipline), research scholars, young professionals, and working executives.

**Eligibility:** Open to the above categories. No prior AI or programming knowledge is required; basic familiarity with Excel and general awareness of financial services are recommended. Participants must bring their own laptop for classes and practice.

**Admission process:** Online application with a brief statement of purpose. Seats are offered on a first-come basis subject to screening; if applications exceed capacity, selection will be based on the statement of purpose and profile diversity (balancing finance-background and technology-background learners).

**Intake:** Target batch of 40 participants (minimum 25 to commence a batch).

## 12. Programme Structure (60 Hours)

Analytics tooling is positioned immediately after the AI module so that participants carry the full toolkit (AI + Excel/Power BI/SQL) into the domain modules that follow.

| Module   | Topic                                                 | Practical Component                                | Hours |
|----------|-------------------------------------------------------|----------------------------------------------------|-------|
| Module 1 | Future of Finance & FinTech Ecosystem                 | FinTech landscape mapping                          | 4     |
| Module 2 | Digital Payments & Payment Architecture               | UPI flow simulation; payment app tear-down         | 6     |
| Module 3 | Digital Banking & Embedded Finance                    | Design a digital banking journey                   | 6     |
| Module 4 | AI for Finance (Foundations + GenAI & Agentic AI Lab) | Prompt engineering + AI labs + automation workflow | 10    |
| Module 5 | FinTech Data Analytics                                | Power BI banking dashboard                         | 6     |
| Module 6 | WealthTech, InsurTech & Investment Technologies       | Robo-advisory design (Excel + AI)                  | 6     |
| Module 7 | Digital Lending & Credit Analytics                    | Credit scoring model                               | 6     |
| Module 8 | Blockchain, Smart Contracts & Tokenisation            | Smart contract demo; tokenisation exercise         | 6     |
| Module 9 | RegTech, Cyber Security & Fraud Analytics             | Fraud detection case                               | 5     |

| Module    | Topic                                    | Practical Component  | Hours |
|-----------|------------------------------------------|----------------------|-------|
| Module 10 | FinTech Innovation Lab & Startup Project | MVP & investor pitch | 5     |

**Total: 60 hours**

### 13. Module-wise Details

#### Module 1: Future of Finance & FinTech Ecosystem (4 hours)

**Topics:** Evolution of money & banking; platform economy; embedded finance; API economy; digital public infrastructure; India Stack (Aadhaar, UPI, Account Aggregator, ONDC); global FinTech trends.

**Practical:** Prepare India's FinTech ecosystem map.

#### Module 2: Digital Payments & Payment Architecture (6 hours)

**Topics:** Payment systems; UPI architecture; IMPS, NEFT, RTGS; QR payments; merchant acquiring; payment gateways & aggregators; tokenisation; CBDC / Digital Rupee.

**Practical:** UPI flow simulation; analyse Google Pay, PhonePe, Paytm, BharatPe and other payment apps.

#### Module 3: Digital Banking & Embedded Finance (6 hours)

**Topics:** Neo banks; digital banks; open banking; API banking; Account Aggregator framework; embedded finance and Banking-as-a-Service.

**Practical:** Design a digital bank for Gen-Z.

#### Module 4: AI for Finance (10 hours)

**Part A – AI Foundations (4 hours):** Machine learning, deep learning, NLP and computer vision — concepts and intuition; discriminative vs. generative vs. agentic AI; how large language models work; evaluating AI outputs (accuracy, precision/recall, and why error costs differ between fraud detection and credit decisions).

**Part B – GenAI & Agentic AI Finance Lab (6 hours):** Prompt engineering for finance workflows; document intelligence — analysing annual reports and financial statements with AI; AI-assisted company evaluation, valuation support and equity-research drafting; bankruptcy-prediction case; agentic automation mini-lab — build a simple financial automation workflow using no-code tools (n8n / Zapier / Copilot agents).

**Practical deliverables:** An AI-assisted equity research note and one working automation workflow.

**Tools:** ChatGPT, Gemini, Claude, Microsoft Copilot, Perplexity; n8n / Zapier.

#### Module 5: FinTech Data Analytics (6 hours)

**Topics:** Advanced Excel for finance; Power BI; SQL basics; financial dashboards; data visualisation and data storytelling.

**Practical:** Create an interactive banking dashboard in Power BI.

#### Module 6: WealthTech, InsurTech & Investment Technologies (6 hours)

**Topics:** Digital investing; robo-advisory; goal-based investing; digital broking; mutual fund platforms; ETF investing; digital insurance distribution; AI in insurance underwriting and claims.

**Practical:** Build a robo-advisory model using Excel + AI; case discussion — Acko, Digit, PolicyBazaar.

### Module 7: Digital Lending & Credit Analytics (6 hours)

**Topics:** Alternative credit scoring; BNPL; the digital lending stack and RBI Digital Lending Guidelines; risk analytics; AI underwriting; fairness, bias and explainability in credit models.

**Practical:** Create a credit scoring model in Excel and interpret its outputs.

### Module 8: Blockchain, Smart Contracts & Tokenisation (6 hours)

**Topics:** Blockchain fundamentals; consensus mechanisms; Ethereum; smart contracts; tokenisation of assets; stablecoins; CBDC.

**Practical:** Smart contract demonstration; tokenisation design exercise — real estate, gold, art, green bonds.

### Module 9: RegTech, Cyber Security & Fraud Analytics (5 hours)

**Topics:** AML & KYC; cyber security; digital fraud typologies including UPI fraud; the DPDP Act and data protection; responsible AI and AI governance in finance.

**Practical:** Analyse fraud cases — UPI fraud, cyber attacks.

### Module 10: FinTech Innovation Lab & Startup Project (5 hours)

Participants work in teams to prepare: a problem statement, prototype, revenue model, AI integration plan, MVP, and an investor pitch. This module feeds directly into the capstone.

## 14. Capstone Project (30 Hours)

The capstone is delivered as a supervised studio, not unsupervised homework: four studio sessions on campus with faculty and mentors, structured mentored team work, and a concluding Demo Day. Participants (in teams of 3–4; working professionals may opt to work individually) choose one of three tracks:

- **Build track.** Prototype an AI-enabled FinTech product using the low-code toolkit from the programme (e.g., a lending decision dashboard, personal finance AI assistant, or fraud-monitoring dashboard).
- **Strategy track.** A consulting-style engagement — an AI transformation roadmap for a bank/NBFC/insurer, or a market-entry / product strategy study.
- **Research track.** A rigorous whitepaper on a frontier FinTech-AI topic, suitable for publication or conference submission.

| Stage                  | Activity                                                | Hours |
|------------------------|---------------------------------------------------------|-------|
| Problem identification | Select an industry problem; proposal sign-off by mentor | 2     |

| Stage                      | Activity                                                 | Hours |
|----------------------------|----------------------------------------------------------|-------|
| Research & data collection | Market, customers, regulations                           | 6     |
| Solution design            | Financial & technological solution architecture          | 6     |
| Prototype development      | Dashboard / AI model / business model                    | 8     |
| Financial analysis         | Revenue model, costing, valuation                        | 6     |
| Final presentation         | Investor-style pitch at Demo Day before an industry jury | 2     |

**Total: 30 hours.** Deliverables: project report, working prototype or strategy/research artefact, and pitch deck.

## 15. Illustrative Capstone Project Themes

AI Wealth Advisor; AI Stock Research Assistant; Digital Lending Platform; UPI Fraud Detection Dashboard; Financial Chatbot; AI Budget Planner; SME Credit Assessment Tool; Personal Finance App Prototype; Embedded Finance Business Model; Digital Insurance Journey.

## 16. Software & Tools

Microsoft Excel (Advanced); Power BI; SQL (basics); Python (introductory demonstrations, optional); ChatGPT, Gemini, Claude, Perplexity, Microsoft Copilot; n8n / Zapier / Make (no-code automation and agentic workflows); GitHub Copilot (for exposure); Figma/Canva/Lovable/replit (product prototyping). The toolkit relies primarily on free or education-licensed tiers, keeping delivery costs low.

## 17. Assessment & Certification

**Attendance requirement:** A minimum of 75% attendance across contact hours is required for certification eligibility.

| Component                                             | Weight |
|-------------------------------------------------------|--------|
| Practical labs & module deliverables                  | 25%    |
| Case studies & class participation                    | 15%    |
| AI assignments                                        | 15%    |
| Innovation Lab: MVP & investor pitch (Module 10)      | 15%    |
| Capstone project (report + prototype + Demo Day viva) | 30%    |

**Grading:** Pass  $\geq 50\%$  aggregate; Merit 65–79.9%; Distinction  $\geq 80\%$ . Successful participants receive the Certificate in Applied FinTech & Artificial Intelligence issued by SSCBS, with Merit/Distinction recorded where earned. Participants who complete attendance requirements but do not meet the pass threshold receive a certificate of participation.

## 18. Outcomes–Modules–Assessment Mapping

| Learning outcome cluster                                       | Primarily developed in | Primarily assessed through     |
|----------------------------------------------------------------|------------------------|--------------------------------|
| K1–K2: FinTech ecosystem, payments & banking architecture      | Modules 1–3            | Case studies & participation   |
| K3: AI applications in finance                                 | Module 4               | AI assignments                 |
| K4: Blockchain & digital assets                                | Module 8               | Case studies & participation   |
| S1, S4, S7, S8: AI analysis, prompting, reporting, automation  | Module 4               | AI assignments; practical labs |
| S3: Dashboards & analytics                                     | Module 5               | Practical labs                 |
| S6: Digital credit analysis                                    | Module 7               | Practical labs                 |
| S2, S5: Solution design & business model evaluation            | Modules 3, 6, 10       | Innovation Lab pitch           |
| Professional competencies (teamwork, ethics, entrepreneurship) | Modules 9–10; Capstone | Capstone project & viva        |

## 19. Academic Integrity & Responsible AI Use

As an AI-focused programme, AFAl adopts an “AI-assisted, human-accountable” policy. Participants are encouraged to use AI tools in assignments and projects, but must declare the tools and significant prompts used in each submission; the analysis, judgement and conclusions must be their own. Submissions are subject to random viva verification. Plagiarism is governed by University of Delhi norms. During labs, participants must not upload confidential, proprietary or personally identifiable data to public AI tools; anonymised or public datasets will be used throughout.

## 20. Career Opportunities

Participants can pursue roles across: digital banking; payments & transaction banking; FinTech product & business analysis; wealth management & WealthTech; credit & risk analytics; digital lending; InsurTech; financial data analytics; RegTech & compliance; product management; AI-enabled financial services; and FinTech entrepreneurship.

## 21. Resource Persons

Sessions will be delivered by academicians, industry professionals, FinTech practitioners, promoters and venture capitalists, and representatives of regulatory and professional bodies.

## 22. Programme Governance & Quality Assurance

- **Course Coordinator:** Prof. Kumar Bijoy, responsible for academic delivery, scheduling and coordination.
- **Programme Advisory Committee:** Two to three SSCBS faculty members and at least two industry members, advising on curriculum currency and industry linkages.
- **Feedback mechanism:** Structured participant feedback at mid-course and end-course; batch-wise review of results and feedback.

- **Curriculum refresh:** Given the pace of change in AI, Module 4 and the tools list are reviewed and refreshed before every batch; a batch report is submitted to the college after each cycle.

## 24. Fee Structure & Financial Plan

**Proposed fee (per participant):**

| Category                                              | Fee (₹) |
|-------------------------------------------------------|---------|
| Students & Alumni of SSCBS                            | 22,000  |
| Students & research scholars (Any College/University) | 25,000  |
| Working professionals/executives                      | 30,000  |

Taxes will be additional, if applicable, as per prevailing rules.

## 25. Contact Us for any query:

**Prof. Kumar Bijoy**

[kumarbijoy@sscbsdu.ac.in](mailto:kumarbijoy@sscbsdu.ac.in)

+91-9810452266

**Registration Link:** [Link](#)

[https://docs.google.com/forms/d/e/1FAIpQLSfPXF9SPiZgs1xbwl0wl-D-WT1bDqwlx7YRr6g45m-2Z9\\_Jmw/viewform?usp=dialog](https://docs.google.com/forms/d/e/1FAIpQLSfPXF9SPiZgs1xbwl0wl-D-WT1bDqwlx7YRr6g45m-2Z9_Jmw/viewform?usp=dialog)