BITSoM

CENTRE FOR EXECUTIVE AND PROFESSIONAL DEVELOPMENT

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EXECUTIVE CERTIFICATION IN

FINTECH & ARTIFICIAL INTELLIGENCE

FROM BITS SCHOOL OF MANAGEMENT & PwC ACADEMY

About BITSoM

BITSoM (BITS School of Management), an integral part of the esteemed BITS Pilani legacy, stands as a beacon of excellence in business education. Located in the Mumbai Metropolitan Region, BITSoM offers a transformative learning experience driven by world class faculty who bring expertise from top global institutions. With a foundation in entrepreneurial spirit and academic rigour, BITSoM nurtures future leaders equipped to excel in an ever-changing global business landscape.

Why Choose This Course?

- **Dual Certification*:** Receive a prestigious certificate from BITSoM and PwC Academy upon successful completion, recognising your achievement.
- **FinTech Meets AI:** Master the most disruptive forces in finance from digital payments and blockchain to applied AI and automation.
- **Learn from BITSoM Faculty & Industry Experts:** Gain insights directly from distinguished faculty and leading practitioners driving change in global financial services.
- **Industry-Relevant, Future-Ready Curriculum:** Designed for professionals, graduates, and entrepreneurs, focused on digital fluency, applied finance, and leadership readiness.
- **BITSoM Industry Network Advantage:** Leverage BITSoM's strong corporate and alumni connections for exposure to cutting-edge industry practices.
- **Placement Opportunities:** Receive resume reviews, career coaching, and placement support to land your dream role. (Eligibility:70% marks and 65% attendance)

**Certificate Eligibility: Minimum 65% overall attendance and 35% marks in cumulative evaluations score.*

What Will You Learn?

This course blends academic rigor with hands-on learning, equipping you with skills in Agentic AI — the next frontier of autonomous systems. Gain expertise in user-centered product thinking, leverage tools and advanced prompt engineering, and work on 6+ real-world projects.

Toolkit

asana mixpanel monday.com productboard Jira Amplitude

Course Details

Course Duration
6 Months

Time Commitment
8-10 hours per week

Certification
From BITS School of Management and PwC Academy

Condition for Certification

- PwC certification will be awarded to students based on their performance in assessments, which will be conducted in the form of case studies.
- The PwC certification does not include or guarantee any placement or internship opportunities.

Course Curriculum

Module 1:
Digital Finance Blueprint: Core Concepts and Disruption

Focus: Mastering the core language and structure of traditional finance.

Duration: 3 Weeks

Key Topics:

- Core finance concepts: Risk vs Return, Discounting, and Compounding principles
- Overview of financial statements and fundamental analysis
- Introduction to financial markets: Key instruments (equity, debt, derivatives) and market functions
- Defining FinTech, its evolution, and primary domains (Payments, Lending, Wealth)

Module 2:
FinTech Data Accelerator: Toolkit Mastery (Excel, Python, SQL, Viz)

Focus: Establishing the foundational data and programming skills required for all subsequent modules.

Duration: 7 Weeks

Key Topics:

- Financial Modeling with Excel (1 Week): Time Value of Money, basic financial functions, and data manipulation
- Python Programming Basics (2 Weeks): Introduction to Python, data types, control flow, functions, and key libraries (NumPy, Pandas)
- Introduction to SQL and Data Access (2 Weeks): Database concepts, basic querying (SELECT, WHERE, JOIN), and data extraction logic
- Data Visualization with Tableau (2 Weeks): Principles of visual communication, dashboard design, and effective data storytelling

Practical Tools: Excel, Google Sheets, Python, Basic SQL, Tableau

Module 3:
The API Economy: Payments, Lending, and Open Banking

Focus: Mastering the core operational systems that define modern digital finance.

Duration: 3 Weeks

Key Topics:

- Payment infrastructure: UPI, digital wallets, instant payment rails, and payment gateways
- Lending innovation: Peer to Peer lending (P2P), Buy Now Pay Later (BNPL) models, and modern credit scoring logic
- Open Banking and API driven finance: Data sharing frameworks and platform innovation

Practical Tools: Postman for API testing concepts

Module 4:
Machine Learning Fundamentals: The Analytical Engine

Focus: Building the theoretical and statistical foundation for Artificial Intelligence

Duration: 3 Weeks

Key Topics:

- Data preparation in finance: Structured vs unstructured data, cleaning, and feature engineering
- Descriptive statistics and probability for financial data
- Machine learning fundamentals: Supervised Learning (Classification, Regression) and core model assumptions
- Model evaluation: Key performance metrics including Accuracy, ROC AUC, Precision, and Recall

Practical Tools: Utilizing Python skills for theoretical application

Module 5:
Intelligent Applications: AI for Risk, Fraud, and Growth

Focus: Applying Machine Learning models to high value financial verticals

Duration: 4 Weeks

Key Topics:

- Risk and Fraud: Advanced credit scoring and real time anomaly detection for fraud monitoring
- InsurTech: AI applications in insurance (underwriting, claims automation, and risk assessment)
- Client Engagement: AI in customer service (chatbots, virtual assistants) and personalization or recommendation engines
- Financial Risk Overview: How AI addresses credit risk, liquidity risk, and market risk
- Large Language Models and Agentic AI: The new frontier

Practical Tools: Python (advanced Scikit learn), Introduction to basic NLP libraries for labs

Module 6:
The Future Stack: DLT, Governance, and Strategic Trends

Focus: Addressing governance, security, decentralized technology and next generation strategic trends

Duration: 4 Weeks

Key Topics:

- Digital Ledger Technology (DLT): Blockchain fundamentals, cryptographic hashing, smart contracts, and an overview of DeFi or digital assets
- Regulatory Technology (RegTech): KYC or AML automation, compliance reporting, and data governance
- Cybersecurity: Identifying common FinTech threats and defensive measures
- Future Strategy: Analysis of Central Bank Digital Currencies (CBDCs), Sustainable Finance (ESG), and the strategic role of Generative AI in financial workflows

Practical Tools: Online blockchain sandbox, PowerPoint or Miro for business strategy

Module 7:
FinTech Product Studio: Integrated Capstone Project

Focus: Applying integrated knowledge to a complex real world industry challenge

Duration: 2 Weeks

Key Topics:

- Problem definition and project scoping
- Data analysis and model implementation
- Development of strategic recommendation and business plan
- Professional presentation and defense

Practical Tools: Holistic use of Python, Excel, SQL, Tableau, and presentation software

Industry Experts

Prof. Sudip Gupta

Professor of Finance, Johns Hopkins Carey Business School

Prof. Sudip Gupta is a globally recognised finance scholar and educator whose work bridges Artificial Intelligence, Machine Learning, and Finance. Currently a professor of finance at Johns Hopkins Carey Business School, he has pioneered research in algorithmic bias, ESG ratings, alternative credit scoring using AI, generative AI in finance, treasury auctions, and nowcasting with alternative data. His research has been published in leading academic journals such as the Journal of Money, Credit and Banking, the Quarterly Journal of Finance (Best Paper Award), and Management Science.

An award-winning teacher and researcher, Dr Gupta has taught at premier institutions worldwide, including Fordham University (as director of the top-ranked MSQF programme), Indiana University's Kelley School of Business, the Indian School of Business (ISB), NYU Stern, and the University of Maryland's Smith School of Business. At Fordham, he integrated big data and machine learning into the finance curriculum, shaping one of the most advanced programmes in the field.

He holds a Ph.D. and M.S. in economics from the University of Wisconsin–Madison and has been recognised with multiple honours, including the Best Paper Award (Quarterly Journal of Finance, 2022), the Dean's Award for Impact (Johns Hopkins Carey Business School, 2023), and finalist recognition for the Trustee Teaching Award (Kelley School of Business).

Beyond academia, Dr Gupta actively shapes industry and policy. He has served as an adviser to the Competition Commission of India, a member of the State of Karnataka's Big Data Task Force, and as a consultant for leading multinational corporations and global litigation firms. He is also a faculty fellow at the Centre for Responsible AI and affiliated with the Centre for Digital Health and AI.

Dr Gupta is a data hackathon champion, reflecting his passion for applying advanced analytics and AI to solve real world problems in finance, healthcare, and beyond.

Prof. Pulak Ghosh

Professor of Data Analytics, IIM Bangalore

Prof. Pulak Ghosh is the Chair of Excellence and Professor of Decision Sciences at the Indian Institute of Management Bangalore. A leading voice in big data, machine learning, and business analytics, he has previously held academic positions at Emory University and Georgia State University, as well as senior industry roles with Novartis and the State Bank of India. He has advised institutions such as NITI Aayog, the Reserve Bank of India ecosystem, the Karnataka Government, and Bandhan Bank on data driven policy and strategy. Recognised among the "Top 10 Most Influential Analytics Leaders" and as one of the top Indian data scientists globally, he has more than seventy international publications and is a recipient of the International Indian Statistical Association Young Scientist Award.

Admission Process

Submit Application
Complete application form to showcase your motivation and goals

Complete Counselling
Only shortlisted candidates go through the counselling process

Start Learning
Learn from India's top educators and stand out from the crowd

Fees Structure

Application Fee (Non-Refundable)	₹100

	Option 1	Option 2
	Upfront	**EMI** (Through our NBFC partners)
Secure Seat Fee (Non-Refundable)	₹4,000	₹4,000
Programme Fee (Non-Refundable)	₹56,000	₹7,600 x 9 months
Total	₹60,000*	₹68,400*

*GST at 18% extra, as applicable

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