

October 13 – 17, 2025

COURSE TITLE: DIGITAL FINANCE & FINTECH IN AFRICA: THE CASE OF GHANA

Course Overview

This course provides an in-depth exploration of the rise, structure, and impact of digital finance and financial technology (fintech) in Africa, with a specific focus on Ghana. It equips students and professionals with the knowledge and analytical tools to understand how digital innovations are transforming financial services, expanding access, and reshaping regulatory frameworks across the continent. Using Ghana as a case study, participants will explore the interplay between mobile money, digital credit, blockchain, insurtech, and regulatory innovation, and how these developments contribute to financial inclusion, economic development, and fintech entrepreneurship.

Module I: Introduction to Digital Finance and Fintech

This foundational module introduces key concepts in digital finance and fintech. It traces global fintech trends, defines core components such as mobile payments, digital lending, and blockchain, and explains why fintech has become a game-changer in African economies.

Key Topics:

- What is fintech? Global evolution and definitions
- Key components of digital financial services
- Why fintech matters in Africa

Module II: Ghana's Digital Finance Ecosystem

This module maps the fintech landscape in Ghana, covering key institutions, startups, mobile money operators, and regulatory bodies. It emphasizes the unique features and local innovations shaping Ghana's financial transformation.

Key Topics:

- Overview of Ghana's fintech ecosystem
- Role of telcos (e.g., MTN MoMo) and banks
- Regulatory framework (BoG guidelines, Payment Systems Act)

Module III: Mobile Money and Digital Payments

This module explores mobile money's impact on financial inclusion and daily transactions in Ghana. It compares mobile money adoption in Ghana with other African countries and examines innovations such as QR code payments and interoperability systems.

Key Topics:

- Evolution of mobile money in Ghana
- Interoperability and real-time payments
- Customer protection and digital literacy

Module IV: Digital Credit, Lending & Alternative Finance

A detailed look into how fintech is reshaping credit markets in Ghana. The module explores digital lenders, credit scoring based on mobile behavior, peer-to-peer lending, and risks involved in algorithmic finance.

Key Topics:

- Digital credit models (e.g., Fido, Branch)
- Mobile data as alternative credit scoring
- Challenges in consumer protection

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Module V: Blockchain, Crypto, and Central Bank Digital Currencies (CBDC)

This module introduces blockchain and crypto applications in Africa. It focuses on Ghana's exploration of the eCedi and broader implications of distributed ledger technologies in remittances, payments, and identity management.

Key Topics:

- Blockchain 101: Smart contracts, decentralization
- Ghana's eCedi initiative
- Cryptocurrency risks and regulatory stance

Module VI: Insurtech and Emerging Use Cases

This module examines how insurance is being digitally delivered in Ghana. It highlights the role of USSD-based microinsurance and embedded insurance products in addressing coverage gaps for underserved populations.

Key Topics:

- Microinsurance via mobile platforms
- Digital insurance innovations
- Partnerships with mobile operators and banks

Module VII: Fintech Regulation, Risk & Governance

This module explores the policy and regulatory landscape that supports or constrains digital finance in Ghana. It includes a review of the Bank of Ghana's sandbox, licensing categories, data privacy laws, and AML/CFT protocols.

Key Topics:

- BoG's regulatory sandbox and licensing regime
- Consumer data protection and cybersecurity
- Digital ID and KYC compliance

Module VIII: Fintech for SMEs and Inclusive Growth

This module analyzes the role of fintech in supporting SMEs, agriculture, and women-led enterprises. It highlights embedded finance, digital bookkeeping, and supply chain financing as inclusive tools for economic growth.

Key Topics:

- SME financing through fintech platforms
- Women and youth in fintech
- Agriculture and supply chain finance

Module IX: Designing Inclusive Fintech Solutions

Focusing on innovation and human-centered design, this module explores how to create fintech products that are accessible, affordable, and impactful. It includes group work on local fintech design challenges.

Key Topics:

- UX/UI for low-income and rural users
- Human-centered design in fintech
- Designing for financial inclusion

Module X: Case Studies and Future Outlook

This final module showcases real-life fintech success stories in Ghana and across Africa. It concludes with a forward-looking discussion on emerging trends including artificial intelligence, open banking, and regional integration.

Key Topics:

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- Ghanaian fintech success stories (e.g., Zeepay, ExpressPay)
- Emerging trends: Open banking, AI, ESG
- Regional integration and scaling beyond Ghana

Learning Outcomes

By the end of this course, students will be able to:

- Understand the evolution and drivers of digital finance in Africa
- Analyze Ghana's fintech ecosystem and regulatory structure
- Evaluate the impact of mobile money, digital credit, and blockchain
- Assess risks and governance frameworks related to fintech
- Propose inclusive digital finance innovations relevant to local needs
- Predict future developments and challenges in Africa's fintech landscape

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Books and References

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