



CENTRAL BANK OF EGYPT
Egyptian Banking Institute

Digital Transformation and Fintech Certificate

Digital Payment



7642-V1



In-Class



120 hours

Course Description:

This Certificate is designed to equip professionals in finance, technology, and business development with the knowledge and skills needed to navigate and lead digital transformation initiatives within the financial sector. It provides a deep dive into the rapidly evolving world of Fintech, covering essential topics such as AI, big data, blockchain, and cybersecurity. Participants will explore how these emerging technologies are reshaping the future of finance, learn to apply Fintech solutions for financial inclusion and develop strategies for integrating digital transformation into traditional financial institutions. Through practical projects, case studies, and hands-on exercises, learners will gain the tools necessary to drive innovation and adopt Fintech practices within their organizations.

Target Audience:

- Professionals in Finance
- Professionals in technology
- Professionals in business development
- Anyone interested in the future of finance

Course Objectives:

- Apply key trends and technologies in digital transformation to a given project.
- Apply Fintech solutions to a given case and recognize their role in financial inclusion.
- Implement strategies for digital transformation within traditional financial institutions.
- Apply cybersecurity requirements to address threats and regulations in Fintech.
- Implement trending Fintech strategies and utilize design thinking to develop innovative solutions.
- Utilize big data tools to analyze large datasets within financial services.
- Apply AI and machine learning applications to drive digital transformation and Fintech initiatives.

- Utilize the necessary tools and infrastructure to adopt Fintech within an organization.
- Create tokens using blockchain technology.
- Evaluate digital transformation techniques to authenticate proof of ownership in various professional settings.

Course Outline:

Module 1 Introduction to Digital Transformation

- Defining digital transformation.
- Digital transformation Key terms.
- The impact of digital transformation on businesses and industries
- Key trends and technologies driving digital transformation (e.g., cloud computing, big data, artificial intelligence.)
- Digital Transformation project

Module 2: Understanding Fintech

- What is Fintech?
- Landscape of Fintech solutions (e.g., mobile payments, blockchain, robo-advisors.)
- The role of Fintech in financial inclusion
- Financial inclusion and FinTech case study

Module 3: Digital Transformation in Financial Services

- Challenges and opportunities for traditional financial institutions
- Strategies for digital transformation in banking, insurance, and wealth management
- Case studies of successful digital transformations in finance
- Hashing project

Module 4: Fintech Security and Regulations

- Cybersecurity threats in Fintech
- Regulatory landscape for Fintech
- Compliance considerations for Fintech businesses
- Steganography Project

Module 5: Innovation in Fintech

- Emerging Fintech trends (e.g., Open Banking, RegTech.)
- Design thinking for Fintech solutions



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- The future of Fintech
- PayPal project

Module 6: Big Data and Analytics for Fintech

- The importance of data in Fintech
- Big data analytics tools and techniques for financial services
- Using data to drive customer insights and decision-making
- Big data project

Module 7: Artificial Intelligence and Machine Learning in Fintech

- Applications of AI and Machine Learning in finance (e.g., fraud detection, credit scoring.)
- Ethical considerations of AI in Fintech
- AI project

Module 8: FinTech tools

- What tools may aid adopting FinTech?
- How to be infrastructure be ready
- PKI project, QR code project, code case study

Module 9: Blockchain and new trends

- What is blockchain?
- Crypto currencies.
- CBDC.
- The impact of blockchain on FinTech.
- Blockchain and crypto currencies project

Module 10: The Future of Work in Fintech

- The impact of digital transformation on the financial workforce
- New skills needed to thrive in the Fintech industry
- Career opportunities in Fintech
- Digital signature & steganography project

Assessment and Attendance Strategy:

- Participants will be evaluated based on:
 - 15% Participation
 - 15% Individual exercises
 - 10% Presentation
 - 60% Assignments
- Each Participant must achieve 80% attendance of the total

Course Language:

- Material: English
- Instruction and Explanation: Bilingual (EN <>AR)

Prerequisites:

No prerequisite for this certificate