USJ 1875
Université Saint-Joseph de Beyrouth
جامعة القدّيس يوسف في بيروت

Faculté d'ingénierie
École supérieure d'ingénieurs de Beyrouth

inci Faculté d'ingénierie
Institut national des télécommunications et de l'informatique

cfp Centre de formation professionnelle
Professional Training Center
Université Saint-Joseph de Beyrouth

CERTIFICATE IN DIGITAL TRANSFORMATION

Artificial Intelligence
Big Data
Blockchain
NFT

Knowing what a company or individual can benefit from in a rapidly changing environment becomes difficult. This certificate will help make the participant explore:

- Digital Transformation – What is Digital Transforming concept and what are the latest concepts and business models ?
- Emerging Technologies – Technologies empowering the future (AI & Big Data)
- Financial Technologies – Fintech – Reshaping the Financial Services
- Blockchain & Crypto Currency – The Decentralized payments

🌐 **Language:** English

📅 **Dates:** 9, 10, 16, 17, 23, 24, 30 & 31 of March 2023

🎥 **Modality: Online on Zoom |** 6: 00 pm till 8: 00 pm (Beirut Time)

🕐 **Total number of hours** 16 hours

💲 **Training Fees:** 300$

📝 **Registration: click here**

Rudy Shoushany

An experienced leader in the field of information technology, with over 22 years of experience in the financial sector. He specializes as a consultant in financial technologies, governance, compliance, strategies, and cybersecurity in digital transformation. Rudy is an award-winning digital leader, the founder of CryptoTalks & DxTalks, and the owner and general manager of BCCManagement Technology Consultancy firm. He is a member of the Forbes Technology Council and is a keynote speaker, mentor, and advisor on digital transformation strategies, fintech, cybersecurity, governance, and blockchain. Mr. Shoushany is an expert trainer at the Professional Training Center of USJ.

Christophe Zoghbi

A Software Engineer with over 12 years of experience in Software development and various fields of Data Science and Artificial Intelligence. He's the Founder & CEO of Zaka, an Artificial Intelligence education & consulting company that aims to develop the AI sector with a focus on MENA. He is also the Founder & President of Beirut AI, an NGO that brings together the applied Artificial Intelligence community in Lebanon, where he organizes community events and technical workshops to help people understand and apply AI. Mr. Zoghbi is an expert trainer at the Professional Training Center of USJ.

1 INTRODUCTION TO DIGITAL TRANSFORMATION | (2 hours)

- Introduction to Digital Transformation
- Digital Transformation Case
- 3 Components of market leaders
- Transformation versus Change
- Innovation
- Disruptive Innovation
- 3 Digital D's (Digital Product, Digital Process, Digital Services)
- Use case

2 DIGITAL TRANSFORMATION IN FINANCE (4 hours)

- Fintech Storm
- Introduction to Fintech
- Fintech 4.0 Evolution (available technologies trends)
- Overview of Fintech & Market Size
- Financial Model Transformation
- Innovation in finance (Neo Banking, Blockchain)
- GAFA (Google, Amazon, Facebook, Apple)
- Payments API / Sandbox
- Retail Banking of the future

3 EMERGING TECHNOLOGIES | (2 hours)

- 6Ds Framework
- 5G
- Big Data
- Data Science
- Artificial Intelligence (AI)
- Cloud Computing, serverless
- VR/AR
- Quantum computing
- Robotic & Robotic Process Automation (RPA)
- The Internet of Things (IoT)
- 3D Printing
- Use cases

4 ARTIFICIAL INTELLIGENCE | (2 hours)

- Foundations of Machine Learning, Deep Learning, Computer Vision, Natural Language Processing, and Time-series
- Linear and logistic regression
- SVM for cars detection
- Decision trees to detect heart problems
- Neural networks for many real-world applications
- Reinforcement learning for game playing
- Clustering algorithms for unsupervised learning

5 BIG DATA | (2 hours)

- Different types of data
- Foundations of the data science lifecycle
- Latest frameworks used for Big Data analysis
- Appropriate framework to solve a Big Data problem

6 BLOCKCHAIN BITCOIN CRYPTOCURRENCY TECHNOLOGIES | (2 hours)

- Blockchain
- Cryptographic building blocks and reason about their security
- Bitcoin's consensus mechanism
- Individual components of the Bitcoin protocol making the whole system works: transactions, script, blocks, and the peer-to-peer network
- Re-designing mining in alternative cryptocurrencies
- Different cryptocurrencies, such as Ethereum
- Different wallets
- Central Bank Digital Coins CBDC

7 BLOCKCHAIN (NON-FUNGIBLE TOKEN - NFT AND DECENTRALIZED FINANCE – DEFI) | (2 hours)

- Non-fungible tokens NFT
- NFT Use cases
- Concept of Dapps
- Smart contracts and its future use cases
- Decentralized Finance DEFI
- Use cases of DEFI