San Francisco Bay University

Course Title: Cryptocurrency, NFTs, and DeFi

Course Dates: (6 hours- Online) TBA

Times: TBA

Instructor: Ahmed Banafa (Professor of Engineering, San Francisco Bay University)

E-mail: ahmed.banafa@sfbu.edu

Format: **Online – Lecture will be recorded for students to review**

Tuition: **$149**

Course Summary:

Cryptocurrency was created to remove the middle entity when people send/receive money and was designed for the "unbanked" people to gain access to the financial systems; there are almost a billion people who lack access to banking systems. In this course, you will learn the dynamics of Cryptocurrency including the leading crypto coins, Bitcoin and Ethereum. You will be studying the benefits and risks of using cryptocurrency. NFT (Non-Fungible Token) will be discussed as a concept and as a business vehicle. The course also illustrates how NFTs can be used to represent items such as photos, videos, audio, and other types of digital files as unique items, and use Blockchain technology to generate a verified proof of ownership. Another topic covered is DeFi (Decentralized finance) which is a Blockchain-based form of finance that does not rely on central financial entities like banks to offer traditional financial services, making it more secure. In addition, the course also explains Blockchain Technology and its applications. By the end of this course, students will have a good knowledge of Cryptocurrency, NFT, DeFi, and Blockchain Technology and the impact of such technologies on the future of finance and more.

Instructor Bio: Prof. Ahmed Banafa**, Professor of Engineering**

Prof. Ahmed Banafa *has extensive experience in research, operations, and management, with a focus on IoT, Blockchain, Cybersecurity, and AI. He is the recipient of the Certificate of Honor from the City and County of San Francisco, Author & Artist Award 2019 of San Jose State University. He was named as the No.1 tech voice to follow, technology fortune teller, and influencer by LinkedIn in 2018, his research has been featured on Forbes, IEEE, and MIT Technology Review, and he has been interviewed by ABC, CBS, NBC, CNN, BBC, NPR, Washington Post, and Fox. He is a member of the MIT Technology Review Global Panel. He is the author of the book: "Secure and Smart Internet of Things (IoT) using Blockchain and Artificial Intelligence (AI)" which won 3 awards San Jose State University Author and Artist Award, One of the Best Technology Books of all Time Award, and One of the Best AI Models Books of All Time Award. His second book was "Blockchain Technology and Applications" which won One of the Best New Private Blockchain Books and is used at Stanford University and other prestigious schools in the USA. Prof. Banafa's next book, "Quantum Computing" is coming in 2022. He studied Electrical Engineering at Lehigh University, Cybersecurity at Harvard University, and Digital Transformation at Massachusetts Institute of Technology (MIT).*

Weekly Outline:

Week1 (3 hours)

Introduction and class policies
What is Blockchain?
Applications of Blockchain Technology
Advantages and Challenges of Blockchain Technology
What is Cryptocurrency?
Types, Advantages and Challenges of Cryptocurrency
Bitcoin, Ethereum, and other Cryptocurrencies
Class Discussions

Week 2 (3 hours)

What is NFT?
Types of NFT
Advantages and Challenges of NFTs
What is DeFi
Applications of DeFi
Advantages and Challenges of DeFi
DeFi and FinTech
Class Discussions