

**Course title: Blockchain, Web 3.0 and the Metaverse**

## Description of the Program

The Blockchain, Web 3.0, and Metaverse Intensive Program aims to provide participants with a comprehensive understanding of the emerging technologies shaping the digital future. This program is designed for students, faculty, and professionals interested in gaining in-depth knowledge of blockchain technology, digital assets, NFTs, and the Metaverse.

## Aim and Objectives

The primary goal of this program is to explore the intersection of blockchain, Web 3.0, and the Metaverse, emphasizing their potential impact on various industries. The specific objectives include:

- Introducing foundational concepts of Web 3.0 and blockchain technology.
- Analyzing the role of digital assets, cryptocurrencies, and NFTs.
- Investigating the architecture and technologies behind the Metaverse.
- Understanding synergies between these technologies and their future trends.
- Providing hands-on experience in crypto wallets, NFT minting, and Metaverse design.

## Learning Outcomes

By the end of the program, participants will be able to:

- Understand the principles and evolution of Web 3.0.
- Demonstrate knowledge of blockchain technology and its applications.
- Develop hands-on skills in using digital wallets and performing blockchain transactions.
- Analyze the role of NFTs and their real-world applications.
- Engage in discussions about ethical, technical, and governance challenges.
- Participate in a capstone workshop to design a Metaverse experience.

### Mode of delivery and Schedule

Mode: Face-To-Face

Dates: May 26-30, 2025

Monday, May 26			
Time	Session	Instructor	Details
9:00-9:30	Course Introduction	S. Louca	Overview of the course, objectives, and structure
9:30-10:30	Introduction to Web 3.0		Definition, principles, and evolution from Web 2.0; Key features and innovations
10:30-11:00	Coffee Break		
11:00-12:30	Understanding Blockchain Technology	S. Louca	Fundamentals of blockchain; How blockchain enhances Web 3.0
12:30-13:30	Lunch		
13:30-15:00	Digital Assets in Web 3.0	S. Louca	Cryptocurrencies, tokens, and their implications
15:00-15:15	Coffee Break		
15:15-16:30	Interactive Q&A and Discussion	S. Louca	Clarifications, initial reflections, daily wrap-up
19:30-22:00	Dinner		
22:00	End of day 1		

Tuesday, May 27			
9:00-10:30	Crypto Wallets	M. Themistocleous	Install, delete, recover a wallet; Demo transactions and cybersecurity
10:30-11:00	Coffee Break		
11:00-12:30	Blockchain and Disruptive Innovation	M. Themistocleous	Money, banks, and market disruption; NFTs and their disruptive potential
12:30-13:30	Lunch		
13:30-15:00	NFTs	M. Themistocleous	Use cases in arts, gaming, etc.; Security, ownership, and provenance
15:00-15:15	Coffee Break		
15:15-16:30	Hands-on Workshop: Minting NFTs	M. Themistocleous	Creating and transacting NFTs; Daily wrap-up
16:30	End of day 2 - Free time		

Wednesday, May 28			
9:00-10:30	Introduction to the Metaverse	S. Louca	Conceptual framework and historical context
10:30-11:00	Coffee Break		
11:00-12:30	Metaverse Architecture and Technologies	M. Themistocleous	AR, VR, AI integration
12:30-13:30	Lunch		
13:30-15:00	Avatars & NFTs in the Metaverse	M. Themistocleous	Creating your own avatar
15:00-15:15	Coffee Break		
15:15-16:30	Interactive Discussion on Metaverse Use Cases	M. Themistocleous	Group discussions and idea sharing; Daily wrap-up
16:30	End of day 3 - free time		

Thursday, May 29			
9:00-10:30	Synergies Between Web 3.0, Blockchain, and the Metaverse	S. Louca	Technological and economic interactions
10:30-11:00	Coffee Break		
11:00-12:30	Future Trends in Blockchain and the Metaverse	S. Louca	Technologies, innovations, challenges, and open questions
12:30-13:30	Lunch		
13:30-15:00	Capstone Workshop: Designing a Metaverse Experience	M. Themistocleous	
15:00-15:15	Coffee Break		
15:15-16:30	Capstone Workshop Continued & Course Wrap-up		
16:30	End of day 4 - free time		
Friday, May 30			
09:00	Field Trip		
09:00-11:00	University of Nicosia - Metaverse lab	C. Christou	UNIC Metaverse infrastructure and projects demonstration
11:00 - 13:00	CYENS Centre of Excellence	F. Liarokapis	CYENS infrastructure and Metaverse projects; Recent advancements in the area Future trends
13:00-16:00	Lunch		
End of day 5 and course			