

NFT and Blockchain Fundamentals Seminar

FA-0802 · 1 day

Others

Introduction

An accessible, nontechnical introduction to NFTs and the blockchain systems around them. Explore fungible and non-fungible tokens, smart contracts, decentralised applications, representative platforms and marketplace workflows through explanations and demonstrations.

Learning outcomes

- Explain blockchain transactions and distinguish blockchain technology from cryptocurrency.
- Compare proof-of-work mining with proof-of-stake validation.
- Distinguish fungible and non-fungible assets and recognise ERC-20, ERC-721 and ERC-1155.
- Describe smart contracts, dApps and DAOs at an introductory level.
- Outline NFT creation, purchase and sale workflows and identify representative uses.

Prerequisites

No technical or blockchain background is required. For remote participation, reliable internet access and the ability to follow the speaker in the delivery language are needed.

Training outline

1. Blockchain and applications

- What is Blockchain?
- Blockchain Vs Cryptocurrency

- Blockchain Transactions
- Proof-of-work mining compared with proof-of-stake validation; Ethereum uses proof of stake
- Ethereum Virtual Machine (EVM)
- Decentralized Apps
- Decentralized Autonomous Organizations

2. Tokens and standards

- What are Crypto Tokens?
- How does a Crypto token work?
- Broad Categories of Tokens
- Guide to ERC Standard
- Different ERC Standards
- ERC-20 Standard
- Trading ERC-20 Tokens
- ERC-721 Standard
- Trading ERC-721 Tokens
- ERC-1155 multi-token standard: fungible and non-fungible token types

3. NFT concepts and supporting platforms

- What's an NFT?
- The Internet of assets
- NFT examples
- How do NFTs work?
- What are NFTs used for?

Representative blockchain networks

- Ethereum
- Tezos
- Flow
- Cardano
- Wax

Storage and token protocols

- IPFS — content-addressed storage, distinct from an NFT blockchain network
- Filecoin — storage-network context
- Protocols – ERC-721
- Protocols – ERC-1155
- Protocols – Other Protocols

4. Marketplace operations

- Operations on NFT
- Walkthrough of a selected current NFT marketplace, such as OpenSea
- Wallet setup and marketplace connection, such as MetaMask; selected compatibility checked
- Creating a NFT
- Demonstrating an NFT purchase workflow
- Trading Selling (fixed price)
- Trading auction

Use prepared or simulated examples to examine the workflow; marketplace features and availability are checked for the selected demonstration.

5. Historical projects and industry uses

- Colored Coins as historical context
- Counterparty as a historical token-platform example
- CryptoPunks
- CryptoKitties
- Selected NFT projects, without rankings or implied investment endorsement
- Digital art
- Fashion
- Gaming and Sports
- Virtual Worlds
- Collectibles