

45 hours / 1.5 ECTS Credit

Count of points: 127/147

Distributed Lab

Issued on: 12.04.2023

Certificate

This certifies that

Mykhailo Sokolov

has successfully completed Course "Basic theory about decentralized finance"

TOPICS

Ethereum capabilities and differences from Bitcoin • Ethereum basics (ether currency, gas, EOA, contracts) • Must-know components (Metamask, Etherscan) • Transaction structure (nonce, value, receiver, gas price, gas limit, data, signature) • Public and private keys for ECDSA
Block structure (timestamp, gas limit, nonce, header) • Lifecycle of the smart contract • Hardhat & Remix • Smart contract ABI
Working with money • Single-threaded development • Constant & static & dynamic data types • Functions (view, payable) • Events and error handling • Calling other contracts • Stack, memory, storage, calldata, returndata • Inline assembly brief • Libraries (external, internal)
Proxy, delegatecall • Working with signatures & precompiled contracts • Bytecode structure • What is tokens ERC20, ERC721, ERC1155



A stylized, handwritten signature in blue ink.

Artem Chistyakov
Solidity developer at Distributed Lab

A stylized, handwritten signature in blue ink.

Olena Voloshchuk, PhD
Education Manager at Distributed Lab