

BLKN/PROG 352 Ethereum Blockchain

MICROCREDENTIAL AWARDED TO

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Specific Learning Objectives:

Explain the fundamentals of Ethereum, including its architecture, components, and underlying technology (Knowledge). Analyze the consensus algorithms used in the Ethereum blockchain (Analysis). Evaluate the role of smart contracts in the Ethereum ecosystem (Evaluation). Develop a simple smart contract using Solidity (Application). Describe the concept of decentralized applications (DApps) and their significance in the Ethereum platform (Comprehension). Assess the security and scalability challenges associated with the Ethereum blockchain (Evaluation). Investigate various Ethereum scaling solutions, such as sharding, layer-2 solutions, and Ethereum 2.0 (Analysis). Compare Ethereum with other blockchain platforms, such as Bitcoin, Cardano, and Polkadot (Analysis). Examine the role of decentralized finance (DeFi) within the Ethereum ecosystem (Analysis). Identify use cases for the Ethereum platform in various industries, such as supply chain, healthcare, and gaming (Application). Analyze the potential benefits and drawbacks of decentralized autonomous organizations (DAOs) (Analysis). Explain the role of Ethereum Improvement Proposals (EIPs) in the platform's ongoing development (Comprehension).

In partial fulfillment of the requirements for the nanodegree of

Blockchain Studies (CSC - BSTUD)

(4.5 Clock Hours) (80% Passing Score)

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