

# BLKN 336 Scalability and other Challenges



MICROCREDENTIAL AWARDED TO

## Emmanuel Chidi Ameh

Specific Learning Objectives:

Explain the concept of blockchain scalability and its importance in the blockchain ecosystem. Identify the primary scalability challenges faced by blockchain technology. Discuss how increased transaction demand impacts key blockchain projects. Evaluate the consequences of blockchain size and storage requirements for businesses. Recognize the importance of technological growth and scalability in meeting customer needs. Describe the different approaches to addressing blockchain scalability issues. Assess the advantages and disadvantages of various scalability solutions. Analyze the impact of scalability challenges on the adoption of blockchain technology. Compare and contrast on-chain and off-chain scalability solutions. Identify key stakeholders in the blockchain ecosystem and their roles in addressing scalability issues. Investigate the role of consensus algorithms in contributing to or mitigating scalability challenges. Discuss potential future developments in blockchain technology that could address scalability concerns. Evaluate the trade-offs between decentralization, security, and scalability in blockchain networks. Examine the role of layer 2 solutions in addressing scalability challenges.

In partial fulfillment of the requirements for the nanodegree of

Blockchain Studies (CSC - BSTUD)

(4.5 Clock Hours) (80% Passing Score)

6 Mar 2025

Verification ID: 67ca0f42b514df499e01777d

### President

Amando R. Boncales, BA, RBP, MSED, MA, PhDc.

### Comptroller

Julia Ezeji, ABF, HND, (BSc).

### Faculty

Joseph Sylvester, BSIT, RBD.  
Assistant Professor of Practice

Amando Boncales Full Professor  
Johannes Dowe Assistant Professor of Practice

