

ISE CERTIFICATION COURSE DETAILS

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COURSE NAME:	BLOCKCHAIN BASICS	DATE:	29-05-2020

SCREENSHOT:

The screenshot shows the Coursera course page for 'Blockchain Basics'. The course is in the 'Week 3' section, specifically 'Transaction Integrity'. The left sidebar lists the course structure: Public-Key Cryptography, Hashing, Transaction Integrity, Securing Blockchain, and Week 3 Evaluation: Algorithms & Techniques. The main content area displays a slide titled 'Transaction Integrity' with the text 'Transaction for transferring assets should be:'. Below this, three properties are listed: 'Authorized', 'Non-repudiable', and 'Unmodifiable'. To the right of these properties, there are two binary strings: '00101' with a right-pointing arrow and '11001' with a left-pointing arrow. The bottom right corner of the slide has a watermark that says 'Activate Windows Go to Settings to activate Windows.'

BRIEF REPORT: (POINT-WISE)

- 1). Transaction integrity is an important issue during a transaction and to manage it we should at least secure & unique account address, authorize transaction by sending through digital signing, verify that content of transaction is not modified
- 2). The main components of a Ethereum Block are Block, Header, Transaction Hash, Transaction Root, State Hash, State Root. Integrity of the block is managed by assuring that the block header contents are not tampered with, the transactions are not tempered with, state transitions are efficiently computed, hashed, and verified. Remember, the block chain is supposed to be an immutable record. In Ethereum, the block hash is the block of all the elements in the block header, including the transaction root and state root hashes. It is computed by applying a variant of SHA-3 algorithm called Keccak and all the items of the block header.
- 3). Quiz for all the above topics.