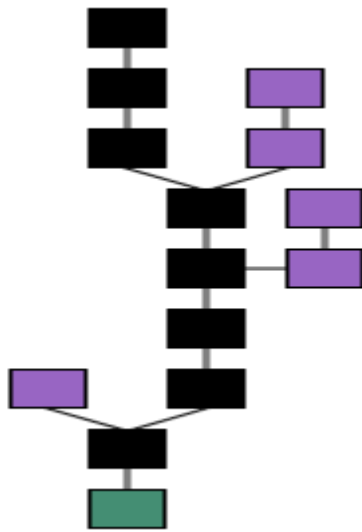# Academic Staff College

The 1-day workshop on "Bit Coins & Blocks Chains Technology" by Mr.Anil Kumar, Founder, ESF Labs & Team as the resource person for staff and students of Dept. ECE on 24.10.2016 by Academic Staff College and Dept. Electronic and Communication Engineering.

The resource person explained that originally the **block chain** is a continuously growing list of records, called *blocks*, which are linked and secured using cryptography. ˙Each block contains typically a hash pointer as a link to a previous block, a timestamp and transaction data. By design, blockchains are inherently resistant to modification of the data. Functionally, a blockchain can serve as "an open, distributed ledger that can record transactions between two parties efficiently and in a verifiable and permanent way." For use as a distributed ledger a blockchain is typically managed by a peer-to-peer network collectively adhering to a protocol for validating new blocks. Once recorded, the data in any given block cannot be altered retroactively without the alteration of all subsequent blocks and a collusion of the network majority.

The outcomes of the workshop are

The participants are able to understand

1. It records and validate each and every transaction made, which makes it secure and reliable.

2. All the transactions made are authorized by miners, which makes the transactions immutable and prevent it from the threat of hacking.

3. It discards the need of any third-party or central authority for peer-to-peer transactions.

4. Decentralization of the technology.

The main chain (black) consists of the longest series of blocks from the genesis block (green) to the current block. Orphan blocks (purple) exist outside of the main chain.

Mr.Anil Kumar, Founder, ESF Labs & Team delivering lecture