Session 1: What is Blockchain?

- Reality about Blockchain and How Blockchain works?
- Blockchain Architecture and Platforms ex. BigChainDB, Corda, Ethereum etc.
- DTL- Distributed ledger
- Consensus Mechanisms ex. POW, POS, DBTF (delegated Byzantine Fault Tolerance) etc.
- Real demo of Blockchain with simple example
- Distributed VS Decentralized network
- Private and Public Blockchain
- Consortium Blockchain
- Permissioned and Permission less Blockchain
- Public and Private Key creation
- Storing Private and Public key
- Mining
- Genesis Block in Blockchain
- Hard fork
- Consensus Mechanism
- 51% Attack theory

Session 2: **Block chain Installation**

- Set up your Private Blockchain
- Blockchain use cases for Banking, Insurance etc.
- Extra: How to design Blockchain Architecture, Blockchain use cases, Requirements Analysis etc.

Session 3: Delving into Blockchain - II

- Design the admins and user Interfaces of Blockchain. Examples Demonstration with HTML5, CSS, Solidity
- Blockchain Architecture and Platforms ex. BigChainDB, Corda, Ethereum etc.

Session 4: Training on Etherum for Blockchain environment

- Basics of Ethereum
- Introduction to Web 3 and Truffle
- Introduction to smart contract
- Components of smart contract
- Ethereum tools ex. Mist, Dapps and accounts

- Ethereum Test Rpc
- Introduction to solidity programming
- Structure of Solidity contract
- DApps and DAOs

Session 5: Real World Block chain Projects

- Introduction to Blockchain platforms ex. Multi chain
- Blockchain as a service (BAAS) on Microsoft Azure
- Blockchain on AWS (Amazon web services)
- Blockchain on IBM Bluemix

Session 6: Architecture and Framework

- Blockchain Ripple Framework
- How to create Blockchain for real projects ex. KYC, Travel Insurance etc.
- Blockchain API
- Blockchain waves platform
- Introduction to Monero
- Introduction to next generation platform- IOTA
- Introduction to IOTA and Tangle Architecture
- Blockchain and Artificial Intelligence
- Blockchain and Internet of Things