

# About NIELIT

National Institute of Electronics and Information Technology, is an autonomous Scientific Society of Ministry of Electronics & Information Technology (MeitY), Government of India. NIELIT Chandigarh was established in 1978 to provide professional services in the areas of Information, Electronics & Communication Technology (IECT). NIELIT Chandigarh is engaged in development of industry oriented quality education and training programmes in the state-of-the-art areas.

#### **About Course**

The course brings the concept of Provence, decentralization and immutability to the transaction data, which is required for every sphere of ITES applications. It will stress upon how Blockchain technology can solve business problems and how to leverage chaincode to develop applications.

## Course Objective

The learner will learn the blockchain technology, its concepts and components. The practical implementation of the technology will be learnt by developing customized blockchain in python and immutable and decentralized applications.

### **Brief Contents**

- Blockchain fundamentals, evolution-history, uses, application areas
- Overview of Python and Using python to understand Cryptographic Algorithms
- Public-Private key, Digital Signature, Digital Certificates
- Blockchain components & applications, Blocks, transactions, DLT, mining, proof of work, consensus
- Public vs Private Blockchain
- Blockchain Use-cases
- Introduction to Hyperledger
- Understanding Python to build a customized blockchain and using in distributed environment.

- Introduction to Ethereum, concept of Smart Contract, wallet, using Solidity to write a Smart Contract.
- Using Frontend to run applications.
- Using metamask to interface public Ethereum blockchain
- Using other tools for Ethereum implementation.
- Decentralized Applications DApps & their applications

Eligibility

Knowledge of python

Duration

Six Weeks with project

#### For further details, Contact:

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