NIELIT Certified Blockchain Professional

NIELIT Certified Blockchain Professional   24 Weeks (06 Weeks per Module)
06 Months Program   Medium of Instruction: Bilingual (English & Hindi)

Seats: 30

Objective

Blockchain technology has gone far beyond its beginnings in banking and crypto currency. The module is designed to equip the students to understand the blockchain technology and its applications.

This module provides learning on blockchain key elements and a strong understanding of. Blockchain technology and its implementation. The concepts of transparency, immutability, decentralization are discussed in detail. The in-depth knowledge of the technology is provided to make applications in Blockchain paradigm.

Eligibility

Final Year B.Tech. (any discipline) / MCA and M.Sc. (IT/CS) / A Level / Diploma (IT/CS)/BCA

Prerequisite

✓ Candidate must have latest computer/laptop with preferably 4 GB RAM or higher and Graphics Card (2 GB)
✓ Software: Windows OS (7 or above), Google Chrome (can be downloaded from respective websites)
✓ Internet connection with good speed *(preferably 2Mbps or higher)*

Course Fees

Rs. 18,000+GST (**Rs 21,240.00)**

Certificate

Certificate will be provided to the participants, based on minimum 75% attendance and on performance (minimum 50% marks) in the online test, conducted at the end of the course.

Methodology

✓ Instructor-led live classes
✓ Instructor-led hands-on lab sessions.
✓ Content Access through e-learning portal
✓ Assessment and Certification

How to Apply?

Step-1: Read the course structure & course requirements carefully.
Step-2: Visit the Registration portal and click on apply button.
Step-3: Create your login credentials and fill up all the details, see the preview and submit the form.
Step-4: Login with your credentials to verify the mobile number, email ID and then upload the documents, Lock the profile and Pay the Fees online, using ATM-Debit Card / Credit Card / Internet Banking / UPI etc.

Course Content

Module No.	Blockchain Technology Associate
Module 1	➢ Introduction to Blockchain ➢ Blockchain – fundamentals, evolution-history, uses, application areas ➢ Blockchain benefits and challenges ➢ Cryptographic Algorithms, Public-Private key, Digital Signature, Digital Certificates, Hashing ➢ Blockchain components and applications, Blocks, transactions, distributed ledger, Mining ➢ Proof of work, consensus protocol, The most prominent consensus mechanisms ➢ Introduction to Bitcoin, mining and trasactions & its usage ➢ Blockchain Use-cases ➢ Blockchains Types : Public, Private,, Consortium ➢ Domain specific Blockchain Applications – FinTech, Internet of Things(IoT), Energy, Industrial & Manufacturing, Healthcare , Academics ➢ Linux Commands, basic shell programming ➢ HTML, CSS, Java Script for front end development
	Blockchain Ethereum Developer
Module 2	➢ The Ethereum ecosystem, ➢ What is Ether, an account, a Faucet ➢ What is Gas, EVM,Consensus Model: Proof of work, Proof of Stake ➢ Ethereum Wallet working, Getting Ethers, Purpose of Mining ➢ Mining hardware and Mining Incentives ➢ Implementing Blockchain using Python ➢ Solidity Language, Data types, Functions, Hash Functions, Mappings ➢ Enumerations, Writing Contracts, Contract Classes and conditions ➢ Setting up Private Blockchain Environment using Ethereum Platform ➢ Ganache Output for Transaction Migration

Module No.	Blockchain dApps Developer
Module 3	➢ Solidity: Creating Events, Inheritance and abstract contracts ➢ Executing contracts with Meta Mask ➢ Ethereum Networks, Creating a Genesis Node ➢ Types &Optimization ➢ Debugging, Contract Design ➢ Developing and Deploying Smart Contracts ➢ Front End Development - NodeJS, Flask, Javascript ➢ GoLang for developing dApps
	Blockchain Hyperledger Fabric Developer
Module 4	➢ Hyperledger – Introduction, Architecture ➢ Hyperledger Projects- Fabric, Sawtooth, Iroha, Burrow ➢ Understanding Hyperledger Fabric and its Architecture ➢ Hyperledger Functionalities and Docker ➢ Hyperledger components – channel, contract, chaincode. ➢ Assets, Participants and Transactions in Hyperledger Composer

Contact Us

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