AICTE Sponsored Online Short Term Course (STC), March 22-26, 2021
BLOCKCHAIN: BUSINESS FOUNDATIONS AND SOLUTION ARCHITECTURES
Organised by Dr. Gourinath Banda
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IIT Indore
(in ONLINE Mode via Google Meetings)

Course Introduction:

This course will introduce the blockchain by detailing on the business foundations and solution architectures prevalent. It is not always beneficial to migrate a solution onto Blockchain approach! This course will present the basics of decentralised networks and ledgers, Consensus mechanisms, Blockchain use case, Basic Blockchain implementation details, Blockchain solution via Blockchain apps, Introduction to Designing & Developing a Blockchain app.

Course contents:

Part 1: Foundations: Basics of Blockchain, Blockchain as Technological Platform for Cryptocurrency and Associated Trading, Blockchain Usecases, Decentralized Ledgers, Blockchain Types (Pri/Pub/Op/Cl), Block creation, Relationship to Cryptography and Hashing, Block Mining Basics, Consensus mechanisms (Past, Present and Future), What is Ethereum Framework, Blockchain Adoption in Industry and Financial transactions, Appreciate Web 3.0 and its relationship with Blockchain, Basics of Blockchain Implementation

Part 2: Solution Architecting: Differences in consensus mechanisms (proof of work, proof of stake, and other proof systems), Other mechanisms, Cryptocurrency as an instrument in Blockchain based solutions, Use cases for public blockchains/private/permissioned blockchains, Need for your own blockchain, Public blockchains considerations, Byzantine Fault Tolerance in Blockchain, Network addresses, Public keys & Private keys working, What is Smart contract?, Blockchain security, Programming languages applicable in the Blockchains realm, Blockchain-based apps (Dapps), Testing and Deployment.

How many seats are available? Limited Who should attend? Faculty from Engineering, Science & Technological Colleges, Institutes and Universities. Additional Information Number of Seats: Limited Course Dates: March 22-26, 2021 Course Fees No registration fee for partcipants from AICTE recognised technical institutes Address for correspondence Dr. Gourinath Banda, Associate Professor Computer Science and Engineering, IIT Indore, Khandwa Road, Simrol, Indore, MP. E-mail : gourinath@iiti.ac.in Phone +91 9717617555 Webpage: www.linkedin.com/in/gourinath-banda/	**Offline Registration Form** (Send Filled form via e-mail to gourinath@iiti.ac.in with a scanned copy of your institute identity card) Name:_____ Designation:_____ Institution:_____ Address:_____ Are you a faculty member from AICTE recognised technical Institute?(Yes or No):_____ E-mail Id:_____ Phone/Mobile:_____ Any other relevant information:_____ Note: Please send the scanned copy of your official institute identity card too. _____ (Signature of the applicant with date)