

Open Course Title: Block Chain Technologies

Target Students from Branches: ECE/TCE/EEE/CSE/Mech/Civil/MCA

The total duration of the course: 25 Hours.

No. of Lecture hours: 5 Hours.

No. of hands-on / Practical: 20 Hours.

Abstract

The digital world has produced efficiencies, new innovative products, and close customer relationships globally by the effective use of mobile, IoT (Internet of Things), social media, analytics, and cloud technology to generate models for better decisions. The blockchain is recently introduced and revolutionizing the digital world bringing a new perspective to security, resiliency, and efficiency of systems. While initially popularized by Bitcoin, Blockchain is much more than a foundation for a crypto currency. It offers a secure way to exchange any kind of good, service, or transaction. Industrial growth increasingly depends on trusted partnerships; but increasing regulation, cybercrime, and fraud are inhibiting expansion. To address these challenges, Blockchain will enable more agile value chains, faster product innovations, closer customer relationships, and quicker integration with the IoT and cloud technology. Further Blockchain provides a lower cost of trade with a trusted contract monitored without intervention from third parties who may not add direct value.

Open Course Details

CO1: Understand the structure of a Blockchain and why/when it is better than a simple distributed database-PO1

CO2: Analyze the incentive structure in a blockchain based system and critically assesses its functions, benefits and vulnerabilities-PO2, PO3

CO3: Evaluate the setting where a blockchain based structure may be applied, its potential and its limitations. PO3, PO5.

Schedule

Day 1:12/02/2019			
Time	Topics	Resource Person Details	CO-PO Mapping
9:30am – 11:00am	Registration+ Inauguration	Arpitha Anushree Amudha	-
11:15am -12:30pm	Introduction to Block Chain	Dr. Usha B A Assco.Prof. Dept. of ISE,BMSIT&M	CO1(PO1)
1:30pm – 3:30pm	Application of Block Chain	Prof. Shanthi D L Asst.Prof. Dept of ISE,BMSIT&M	CO1(PO1)

Day 2:13/02/2019			
Time	Topics	Resource Person Details	CO-PO Mapping
9:30am – 11:00am	Cryptographic Basic	Prof. Swetha M S Asst.Prof .Dept of ISE,BMSIT&M	CO1(PO1) CO2(PO2)
11:15am -12:30pm	Security Algorithms		
1:30pm – 3:30pm	Key management		
Day 3:14/02/2019			
Time	Topics	Resource Person Details	CO-PO Mapping
9:30am – 11:00am	Block Chain for Health Monitoring System	Dr. Pushpa S K Prof.Dept of ISE,BMSIT&M Dr. Usha B A Assco.Prof. Dept. of ISE,BMSIT&M	CO3(PO3)
11:15am -12:30pm	Block Chain for Agriculture		
1:30pm – 3:30pm	Block Chain for Defense System		
Day 4:15/02/2019			
Time	Topics	Resource Person Details	CO-PO Mapping
9:30am – 11:00am	Smart Contracts: Overview of Algorithmic Decision making	Dr. Anjan Assoc Prof. Dept of ISE,BMSIT&M	CO2(PO1)
11:15am -12:30pm	Smart Contracts: Distributed Autonomous Organizations		
1:30pm – 3:30pm	Smart Contracts: Connecting external data and physical resources	Prof. Vidya R Asst.Prof. Dept of CSE,BMSIT&M	CO2(PO2)
Day 4:16/02/2019			
Time	Topics	Resource Person Details	CO-PO Mapping
9:30am – 11:00am	Hands on Block Chain		CO3(PO3 & PO 5)
11:15am -12:30pm	Hands on Block Chain		
1:30pm – 3:30pm	Valedictory function	-	

Open course coordinator

HOD ISE

