



MALLA REDDY ENGINEERING COLLEGE

(Autonomous)

Maisammaguda(H), Gundlapochampally Village, Medchal
Mandal, Medchal-Malkajgiri District, Telangana State – 500100

CIRCULAR

Date: 13/12/2018

All the 2nd /II Year/Sem students are hereby informed that the Malla Reddy Engineering College (Autonomous) is planning to organize Value Added Courses like Autonomous Robotics -II, Multimedia - 2D & 3D Basic Concepts, Green Matte Studio - Video Effects/Transitions, Different Technologies of Additive Manufacturing, Python with DJANGO, Foundations Of Blockchain, Labview in Centre Of Excellence. In this regard Interested students are hereby directed to register for this Courses on or before 17/12/2018. For further details, please contact Centre of Excellence, MREC(A)


Principal

Principal
Malla Reddy Engineering College
Maisammaguda, Dhulapally,
(Post Via Kompally), Sec'bad-500100

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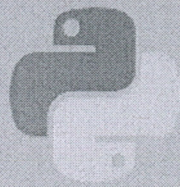
MALLA REDDY ENGINEERING COLLEGE
MAIN CAMPUS, AUTONOMOUS INSTITUTION
Maisammaguda, Dhulapally (Post) via Kompally,
Secunderabad-500100 Medchal - Malkajgiri District Telangana, India



COMPUTER SOFTWARE

HTML, PYTHON WITH DJANGO, JAVA,
SCRATCH PROGRAMMING

LAB VIEW, FOUNDATION OF BLOCK CHAIN,
MATLAB, BLOCK CHAIN REVOLUTION, MATLAB PRO,
ADVANCE JAVA, ADVANCE PYTHON.



python



Java

Course Duration -: 4 Months

Before Software can be Reusable

it First has to be Usable.

Raveesh

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MALLA REDDY ENGINEERING COLLEGE

(An UGC Autonomous Institution, Affiliated to JNTUH,
Accredited 2nd time by NAAC with 'A' Grade & NBA)
Maisammaguda (H), Medchal-Malkajgiri District,
Telangana State – 500100

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Course Name: Fundamentals of Blockchain Technology

Introduction of Cryptography and Blockchain:

What is Blockchain, Blockchain Technology Mechanisms & Networks, Blockchain Origins, Objective of Blockchain, Blockchain Challenges, Transactions And Blocks, P2P Systems, Keys As Identity, Digital Signatures, Hashing, and public key cryptosystems, private vs. public Blockchain

BitCoin and Cryptocurrency:

What is Bitcoin, The Bitcoin Network, The Bitcoin Mining Process, Mining Developments, Bitcoin Wallets, Decentralization and Hard Forks, Ethereum Virtual Machine (EVM), Merkle Tree, Double-Spend Problem, Blockchain And Digital Currency, Transactional Blocks, Impact Of Blockchain Technology On Cryptocurrency.

Introduction to Ethereum:

What is Ethereum, Introduction to Ethereum, Consensus Mechanisms, How Smart Contracts Work, Metamask Setup, Ethereum Accounts, Receiving Ether's What's a Transaction?, Smart Contracts.

Introduction to Hyperledger:

What is Hyperledger? Distributed Ledger Technology & its Challenges, Hyperledger & Distributed Ledger Technology, Hyperledger Fabric, Hyperledger Composer

Solidity Programming:

Solidity - Language of Smart Contracts, Installing Solidity & Ethereum Wallet, Basics of Solidity, Layout of a Solidity Source File & Structure of Smart Contracts, General Value Types (Int, Real, String, Bytes, Arrays, Mapping, Enum, address

Blockchain Applications:

Internet of Things, Medical Record Management System, Domain Name Service and Future of Blockchain, Alt Coins



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Village,
Medchal Mandal, Medchal-Malkajgiri
District,
Telangana State - 500100

Course: FOUNDATIONS OF
BOCKCHAIN
Date: 17/12/2018 to 13/04/2019

Registered Students

SL.No	Roll No	NAME	BRANCH
1.	17J41A0111	BODDU VAMSI KRISHNA	CE
2.	17J41A0115	CHINNASHERI SAMARASIMHA REDDY	CE
3.	17J41A0124	GURRAM DEVARAJ	CE
4.	17J41A1202	ANMISHETTY NAGAPRIYA	IT
5.	17J41A1206	BANKU DHEVARSHINI	IT
6.	17J41A1211	CHINNAGARAJU NAVEEN KUMAR	IT
7.	17J41A1216	GAMPA AARTHI	IT
8.	17J41A1222	KASANAGOTTU SAI SHANKAR	IT
9.	17J41A1231	MOHAMMED REHAN ABBAS	EEE
10.	17J41A0201	AKULA NAGARAJU	EEE
11.	17J41A0205	B MRINALINE	EEE
12.	17J41A0216	CHINDIRAM SAI NATH	EEE
13.	17J41A0227	KETHIRI SAI KRISHNA	ME
14.	17J41A0304	BADAVATH NAGENDRABABU	ME
15.	17J41A0313	DANGETI SATYA SAI SRIKAR	ME
16.	17J41A0323	K PAWAN	ME
17.	17J41A0329	KOLUKULURI KIRAN VARMA	ECE
18.	17J41A0405	BELDE UJITH KUMAR	ECE
19.	17J41A0410	BUSIM NAGA HARSHITA	ECE
20.	17J41A0418	GUNTURU VENKATA SAI PRANEETA	ECE
21.	17J41A0422	JINDAM SUHAS	ECE
22.	17J41A0428	KASANI PRASHANTH	MINING
23.	17J41A2503	BODAKUNTLA VIDYADHAR	MINING
24.	17J41A2508	GARA PAVANKALYAN	MINING
25.	17J41A2512	GURIJALA PREM SAGAR	CSE
26.	17J41A0502	AMBATI SONY	CSE
27.	17J41A0507	CHALAVADI SUMANTH	CSE
28.	17J41A0512	ENUGALA SAI PRASHANTH REDDY	CSE
29.	17J41A0518	K ANITEJ REDDY	CSE
30.	17J41A0526	KURAPATI HARSHITH	CE

Raveesh

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SUMMARY

FOUNDATIONS OF BLOCKCHAIN

Blockchain is a specific type of database. It differs from a typical database in the way it stores information; blockchains store data in blocks that are then chained together. As new data comes in it is entered into a fresh block

Although blockchain has a variety of definitions, a blockchain can best be described as a data structure of blocks that are chained together to form a collection of records, called a ledger, with cryptography being a key ingredient in the process. A blockchain doesn't have a storage mechanism; instead, it has a set of protocols that govern the way in which information is forged. So, a blockchain can be stored in flat files or in a database.

Blockchain technology gained popularity due to the fact that its integrity can't easily be compromised. A compromised blockchain can be recognized for what it is, and rejected quite easily by anyone in a network. This integrity is achieved by cryptography, which is what binds the blocks together; we'll study this idea of cryptography

Blockchain's promise of providing such robust integrity is what eventually paved the way for the idea of sharing chains of data in untrusted **peer-to-peer (P2P)** networks. Validation of the blocks in a blockchain is what makes sure that a blockchain has a valid global state that can be accepted by everyone. Due to a blockchain's ability to share information in an open P2P network without any central authority governing it, the technology can have many different applications; however, the technology could not simply just be deployed to these applications immediately without any troubleshooting. Although blockchain technology, from the beginning, had a huge role to play in the decentralization of applications, it still faced several challenges with regards to its application in trustless environments. One of the biggest challenges was keeping a blockchain consistent across all the participants of a P2P network. This was solved by creating a consensus algorithm, which agrees on how the blocks should be appended to grow the chain in a trustless environment.

The term blockchain actually entails a number of concepts, including P2P network management, consensus mechanism, and more, all contributing to the creation of a decentralized application.



MALLA REDDY ENGINEERING COLLEGE

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Certificate Of the Course Completion

This is to Certify that

GURRAM DEVARAJ

*has Successfully Completed Foundations Of Blockchain Course
Offered by Centre of Excellence, MREC(A) on 13/04/2019
bearing with Roll No. 17J41A1247 and Branch CE.*

Dr. Yogesh Madaria
CONVENOR

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Dr. S. Sudhakara Reddy
Conference Chair & Principal



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This is to Certify that

K ANITEJ REDDY

*has Successfully Completed Foundations Of Blockchain Course
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bearing with Roll No. 17J41A0518 and Branch CSE.*

Dr. Yogesh Madaria
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Dr. S. Sudhakara Reddy
Conference Chair & Principal



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This is to Certify that

KETHIRI SAI KRISHNA

*has Successfully Completed Foundations Of Blockchain Course
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bearing with Roll No. 17J41A0227 and Branch EEE.*

Dr. Yogesh Madaria
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Dr. S. Sudhakara Reddy
Conference Chair & Principal



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Certificate Of the Course Completion

This is to Certify that

CHINNAGARAJU NAVEEN KUMAR

*has Successfully Completed Foundations Of Blockchain Course
Offered by Centre of Excellence, MRECA(A) on 13/04/2019
bearing with Roll No. 17J41A1211 and Branch IT.*

Dr. Yogesh Madaria
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Dr. S. Sudhakara Reddy
Conference Chair & Principal



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Certificate
Of the Course Completion

This is to Certify that

GARA PAVANKALYAN

*has Successfully Completed Foundations Of Blockchain Course
Offered by Centre of Excellence, MREC(A) on 13/04/2019
bearing with Roll No. 17J41A2508 and Branch MINING.*

Dr. Yogesh Madaria
CONVENOR

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Conference Chair & Principal