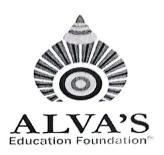
Shobhavana Campus, Mijar – 574225, Moodbidri. Dakshina Kannada Karnataka, India.



# Department of Computer Science and Engineering CERTIFICATION COURSE

on

"Block Chain Technologies"

**ACADEMIC YEAR** 

2019-2020



Shobhavana Campus, Mijar, Moodbidri – 574 225 Phone: 08258-262725 Fax: 08258-262726

## DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Ref No: AIET/CS/CC/2019-2020/001

Date: 5/09/2019

Place: AIET, Moodbidri.

### APPROVAL LETTER

To,

The Principal, AIET, Moodbidri

Respected Sir,

Sub: - <u>Approval for Organizing the Students Certification/Training Program on</u>

"Block Chain Technologies"-Reg.

With reference to the subject cited above, I would like to bring to your kind notice that, the Department is planning to host a Student Training Program/certification courseon "Block Chain Technologies" from "27th September 2019 to 04th October 2019".

Kindly consider the above request and approve the same for further proceedings.

Thanking you Sir.

Coordinator:

Mr. Venkatesh Bhat

Head of the Department:

Dr. Manjunath Kotari H. O. D.

Dept. Of Computer Science & Engineering Alva's Institute of Engg. & Technology Mijar, MOODBIDRI - 574 225

Principal

PRINCIPAL Dva's Institute of Engg. & Technology, Mijan MOGDEIDRI - 574 225, PM



Shobhavana Campus, Mijar, Moodbidri - 574 225 Phone: 08258-262725 Fax: 08258-262726

## DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Dated 24/09/2019

#### **CIRCULAR**

The Certification course/ Workshop on Block Chain Technologies in Assoctaion with EMURGO Academics, Benguluru, will be conducting from 27th Sepetmber 2019 to 4th October 2019 in Network Lab, Main Block, AIET, Mijar. All registered students are hereby informed to attend and actively participate in the course.

у(HOD) Н. О. D.

Dept. Of Computer Science & Engineering Alva's Institute of Engg. & Technology Mijar, MOODEIDRI - 574 225

#### Resource Person

Mr. Sudeep Sagar

EMURGO Academics
Bharath.mallapur@emurgo.com

#### Convener:

Prof. Manjunath Kothari H.O.D Department of CSE

#### Coordinators:

1. Prof. Venkatesh Bhat, CSE, BMSCE Mob: 9449954834 Email id: venkateshbhat2007@gmail.com

2. Mr. Sushanth Mangasuli Mob: 9742164671

Email id: sushantm04@gmail.com

### ABOUT THE INSTITUTION

Alva's Education Foundation (AEF) established in 1995 with the vision of our Chairman Dr. M. Mohan Alva has succeeded in making Moodbidri, an Educational hub in the South Canara Region, with more than 25000 students pursuing various courses ranging from primary school to post-graduate courses in social sciences, pure sciences, engineering and management. There are 21 institutions functioning under the Alva's Education Foundation.

Alva's Institute of Engineering and Technology, Moodbidri is a Premier Engineering Institute of Alva's Education Foundation, established in the year 2008. The college is certified to the ISO 9001: 2008 standards. The institute offers top quality education in five under graduate programs in Engineering- Computer Science, Civil, Electronics & Communications, Information Science, and Mechanical Engineering- Three Post Graduate programs- Master of Technology in Thermal Power Engineering, Computer Science & Engineering, VLSI Design Embedded System and Master of Business Administration.



## Alva's Institute of Engineering and Technology, Moodbidri



## 8 days Certification course/Workshop on

"Blockchain Technology"

From 27th Sep to 4th Oct 2019

Organized by

Department of Computer Science and Engineering
In Association with
Emurgo Academics



Venue: Network lab, Main Building, AIET, Mijar

#### ABOUT CSE DEPARTMENT

The Department was started in the year 2008 with an intake of 60 for the undergraduate program. The program has become popular among students due to the achievements and rigor. The department has well-equipped classrooms and computer laboratories with highend systems as per the AICTE norms. The department is affiliated to Visvesvaraya Technological University (VTU).

The Department carries out various Industry-Institute interaction events for the benefit of the students. The Department conducts various Seminars and Technical talks in collaboration with various Companies also. Faculty members are of many Professional societies like IEEE, ISTE, etc. With an objective of developing core competence in the respective subject specializations and for learning newer technologies, the Department has formed the various Technical divisions.

#### COURSE CONTENT

Introduction to Blockchain
Understanding SHA256
Defense against Attackers
Creating a Blockchain
Cryptography
Cryptocurrency
Smart Contract

#### PROGRAM SCHEDULE

#### 27-September- 2019

Inauguration: 09:30 am to 10:00 am
Keynote Address: 10:00 am to 11:00 am
Tea Break: 11:00 am to 11:15 am
Session 1: 11:15 am to 01:00 pm
Lunch Break: 01:00 pm to 02:00 pm
Session 2: 02:00 pm to 05:00 pm

#### 01-October- 2019

 Session 12:
 09.00 am to 11:00 am

 Tea Break:
 11.00 am to 11.20 am

 Session 13:
 11.20 am to 01.00 pm

 Lunch Break:
 01:00 pm to 02:00 pm

 Session 14:
 02:00 pm to 05:00 pm

#### 28-September- 2019

 Session 3:
 09.00 am to 11:00 am

 Tea Break:
 11.00 am to 11.20 am

 Session 4:
 11.20 am to 01.00 pm

 Lunch Break:
 01:00 pm to 02:00 pm

 Session 5:
 02:00 pm to 05:00 pm

#### 02-October- 2019

 Session 15:
 09.00 am to 11:00 am

 Tea Break:
 11.00 am to 11.20 am

 Session 16:
 11.20 am to 01.00 pm

 Lunch Break:
 01:00 pm to 02:00 pm

 Session 17:
 02:00 pm to 05:00 pm

## 29-September- 2019

 Session 6:
 09.00 am to 11:00 am

 Tea Break:
 11.00 am to 11:20 am

 Session 7:
 11.20 am to 01:00 pm

 Lunch Break:
 01:00 pm to 02:00 pm

 Session 8:
 02:00 pm to 05:00 pm

### 03-October- 2019

 Session 18:
 09.00 am to 11:00 am

 Tea Break:
 11.00 am to 11.20 am

 Session 19:
 11.20 am to 01.00 pm

 Lunch Break:
 01:00 pm to 02:00 pm

 Session 20:
 02:00 pm to 05:00 pm

### 30-September- 2019

 Session 9:
 09.00 am to 11:00 am

 Tea Break:
 11.00 am to 11:20 am

 Session 10:
 11.20 am to 01.00 pm

 Lunch Break:
 01:00 pm to 02:00 pm

 Session 11:
 02:00 pm to 05:00 pm

#### 04-October- 2019

 Session 21:
 09.00 am to 11:00 am

 Tea Break:
 11.00 am to 11.20 am

 Session 22:
 11.20 am to 01.00 pm

 Lunch Break:
 01:00 pm to 02:00 pm

 Session 23:
 02:00 pm to 05:00 pm

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Shobhavana Campus, Mijar, Moodbidri, D.K - 574225

## Workshop on Blockchain Technology 27th Sep to 4th Oct 2019

III SEM -CSE-A- Section

S. No	USN	Name	27/9	27/9	28/9	28/9	339	29/01	39/09	349	1/10	1/10	2/10	3/10 3/10 4/10 4/10
1.	4AL18CS001	Abhishek Joshi		2	3	4	5	6	4	8	8	9	A	10 11 12 13
2.	4AL18CS002	Abhishek S Harsoorkar		2	3	4	5	6	7	8	9	10	11	12 13 14 15
3.	4AL18CS004	Akash S	١	2	-3	4	5	6	7	8	9	10	A	11 12 13 14
4.	4AL18CS005	Ambika V	A	A	A	A	-A	A	B	4				
5.	4AL18CS011	Archana J C		9	3	4	5	A	6	7	8-	9	A	10 11 12 13
6.	4AL18CS012	Ashish Gracion Menezes	1	2	જી	4	á	6	7	8	9	10	11	12 13 14 15
7.	4AL18CS016	Chandana S	1	2	3	4	5	G	7	8	9	10	11	12 13 14 15
8.	4AL18CS017	C K Chethan	١	2	3	4	5	6	7	8	9	10	11	19 13 14 15
9.	4AL18CS020	D Richard Franklin	١	2	3	4	5	6	7	8	9	10	11	12 13 14 15
10.	4AL18CS021	Felina Simon Menezes	1	2	3	4	A	A	7	8	9	10	11	12 13 14 15
11.	4AL18CS022	Felomina Jancy	1	A	2	3	A	A	7	8	9	10	11	12 13 14 15
12.	4AL18CS023	Gudugunti Anirudh		2	3	4	5	6	7	8	9	10	10	12 13 14 15
13.	4AL18CS024	Hanan Saleem Baji		A	2	3	4	5	6	7	8	9	10	11 12 13 14
14.	4AL18CS025	Hymha N Raj	A	A	1	2	3	A	4	5	6	7	A	8 9 10 11
15.	4AL18CS029	Jasline Sharon Tauro	1	2	A	4	3	4	5	6	7	8	9	10 11 12 13
16.	4AL18CS030	Jyothi B R	A	A	1	2	3	4	5	6	7	8	A	9 10 11 12
17.	4AL18CS031	K Isha Hegde	1	2	3	A	4	5	6	7	8	9	(0	11 12 13 14
18.	4AL18CS034	Karthik S	1	2	3	4	5	G	7	8	9	10	)1	12 3 14 15
19.	4AL18CS037	Khatheeja Safreena	1	2	3	4	15	6	3	8	9	10	11	12 13 14 15
20	4AL18CS039	Krishnitha	1	2	3	4	5	6	7	8	9	10	11	12 13 14 15
21	4AL18CS041	Lavanya D M	1	12	3	4	5	6	12	8	9	10	11	12 13 14 15
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A ya's Institute of Engineering & Tochnology Shobhavana Campus, Mijar, Moodbidri, D.K - 574225

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23.	4AL18CS049	Mohammed Mukarram	A	4	D	4	5	A	7	8	9	10	11	12	13	14	15
24.	4AL18CS052	Nihal Rafig	.)	2	3	4	5	6	7	0	3	4	5	10	7	8	9
25.	4 ALI PC8040	Lanson	1	2	3	4	A	A	5	6	7	10	9	12	11	14	15
	1AL18CS032		1	2	3	LP	5	۵	7	8	9	10	A	11	12	12	13
27/1	IPLIFCY033	Karthik HB		2	3	4	5	A	6	7	8	9	A-	10	11	12	13
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Dept. Of Computer Science & Engineering Tochnology

Alva's Institution DESIDRI - 574 225

Mijar, INOODESIDRI - 574 225

## A. 'a's Institute of Engineering & T. chnology Shobhavana Campus, Mijar, Moodbidri, D.K - 574225

## Workshop on Blockchain Technology 27th Sep to 4th Oct 2019

#### III SEM -CSE-B- Section

Sl.No.	USN	Name	27/9	279	289	28/9	339	29/9	30/05	30/9	1/10	1/10	2/10	10/10	7,0	14/10	1401
1.	4AL18CS057	Prajwal 2	-	-	A		P	A	A		1	7.0			1	1	1/1
2.	4AL18CS059	Pramod R	1	12	3	4	15	6	7	8	9	10	11	12	17	14	15
3.	4AL18CS065	Rachana B S	A	A	1	2	3,	4	5	6	7	8	A	9	10	111	112
4.	4AL18CS075	Sanjana	11.	12	3	14	15	A	6	7	8	9	10	11	12	12	14
5.	4AL18CS077	Shailashree	A	A	A		A	A	2	3	4	5	6	7	8	9	10
6.	4AL18CS078	Shiza Amreen J	A	A	Ĭ	2	A	A	3	4	5	6	A	7	8	9	lo l
7.	4AL18CS079	Shraddha Acharya	1	2	3	4	A	A	5	6	7	8	9	10	11	12	13
8.	4AL18CS084	Sneha G	A	A	A	1	2	3	4	5	61	7	R	81	91	10	11
9.	4AL18CS085	Sneha H R	A	A	A	1	2	3	4	5	61	7	7.	8	9	10	11 1
10.	4AL18CS089	Sujana	1	2	m	1	2	A	3	41	51	6	7	8	91	10	ii l
11.	4AL18CS090	Sujaya	1	21	A	1	2	A	3	41	5	6	7	8	91	10	11
12.	4AL18CS091	Swathi B C	A	A	A	1	2	3	41	5	6	7	A	8	9 1	10	11 1
13.	4AL18CS093	Tushit Shukla	1	2	3	4	5	6	2	8	91	10	$n \mid$	12	131	14	15
14.	4AL18CS094	V Anjana Pai	1	2	3	4	5	6	8	8	91	10	11	12	13	14	15
15.	4AL18CS095	Vandana	11	9	3	4	5	6	7	8	91	10	11	12	13	14	15!
16.	4AL18CS096	Vanishree Binjadagi	A	1	1	2	3	4	5	6	7	8	9	10	11	12	131
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A) a's Institute of Engineering & Tochnology Shobhavana Campus, Mijar, Moodbidri, D.K - 574225

Workshop on Blockchain Technology 27th Sep to 4th Oct 2019

V SEM -CSE-A- Section

SI.No.		Name	27/9	27/9	289	28/9	294	29/9	306	30/9	1/10	1/10	2/10	7,0	3/10	4/1	4/10	
1.	4AL16CS078	Harshith S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
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## A) a's Institute of Engineering & Thoology Shobhavana Campus, Mijar, Moodbidri, D.K - 574225

## Workshop on Blockchain Technology 27th Sep to 4th Oct 2019

V SEM -CSE-B- Section

SI.No.	USN	Name	21/1	27/9	10	28/9	23/	29/9	30/01	20/0	.,	1.7	T	1~	T	1.7	147
1.	4AL17CS087	Shetty Disha Ravindra	101/1	2	28/9	20/7	-09	277	17/01	349	Vio	110	2/10	710	3/10	4/10	4/10
		Sushmitha B Poojary	++	2	A A	H	4	A-	B	A	4	2	5	6	ウ	8	9
	4AL17CS106		+;	2	A	4	H	-A-	B	A	3	2	5	6	7	8	9
4.			+	1	n	H	H	.#	A	A	3	2	5	6	7	8	9
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Shobhavana Campus, Mijar, Moodbidri, D.K - 574225

## Workshop on Blockchain Technology 27th Sep to 4th Oct 2019

### VII SEM -CSE-A- Section

Sl.No.	USN	Name	27/9	27/9	289	28/9	2009	29/2	50/09	30/9	YID	1/10	2/10	3/10	1/10	1/0	9/10	
1.	4AL16CS079	S K Rahul	A	A	A	A	A	A	1	2	3	4	5	6	7	8	9	
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## ALVA'S INSTITUTE OF ENGINEERING AND TECHNOLOGY

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## DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

## MCQ QUIZ ON "BLOCK CHAIN TECHNOLOGY"

1. Which of the following is popularly used for storing bitcoins?

	b)	Wallet
	c)	Box
	d)	Stack
2.		nich site run by Ross Ulbricht was closed by the FBI for letting people buy drugs with coin?
	a)	Silk Road
	b)	Lace Place
	c)	Silk Street
	d)	Dark Alley
3.		nich of these US states introduced the BitLicense regulation for cryptocurrency mpanies?
	a)	New York
	b)	California
	c)	Texas
	d)	Washington
4.	Cry	ptographic Hash Function transforms an arbitrary length of a fixed length string that more or less as a Fingerprint of the document
	a)	True
	b)	False
5.	Wł	nat is the name of the famous Bitcoin exchange from Japan that collapsed in 2014?
	a)	Blockchain.info
	b)	Tradehill
	c)	Mt. Gox



## DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

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- 6. What does the block in the blockchain consist of?
  - a) Transaction data
  - b) A Hash point
  - c) A Timestamp
  - d) All of these
- 7. After 10 Minutes a new block is formed that contains latest transactions
  - a) True
  - b) False
- 8. A bitcoin address collision happens when 2 different payments are made at the same time to the same bitcoin address
  - a) True
  - b) False
- 9. What is not a ledger type considered by users in Blockchain?
  - a) Distributed Ledger
  - b) Decentralized Ledger
  - c) Both a and b
  - d) None of these
- 10. What is the impact of information leak for an organization?
  - a) Loss in profit
  - b) Loss of trust in costumers
  - c) Cut down the reputation of the organization
  - d) All of these
- 11. What time did Bitcoin Network Start?
  - a) January 2009
  - b) September 2001

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#### DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

- c) November 2008
- 12. How many new Bitcoins are created every day?
  - a) 2200 Except of leap year
  - b) 3600
  - c) 7200
  - d) 5000
- 13. What is the initial application for which Blockchain was designed?
  - a) Peer-to-peer finance application
  - b) Research Project
  - c) Open source finance software to connect Banks
  - d) None of these
- 14. An orphan block is only created when 51% attack is successful
  - a) True
  - b) False
- 15. Where is the bitcoin central server located?
  - a) Washington DC
  - b) Undisclosed Location
  - c) London
  - d) None of these
- 16. What does a ledger in blockchain does?
  - a) Mapping between owner and object
  - b) Identification of objects owned
  - c) Identification of owners
- 17. First step of Blockchain project implementation is?
  - a) Requirement identification



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## DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

- b) Feasible study on the security
- c) Controlling and monitoring the project
- d) Screen idea consideration
- 18. What is the name of the first academic paper that describes bitcoin commonly referred to as?
  - a) The origins of money
  - b) The Bitcoin Whitepaper
  - c) The great unrevealing
- 19. Which of the following is important for Blockchain
  - a) Database Security
  - b) Auditing
  - c) Planning
- 20. How often does Bitcoin ledger reconcile
  - a) Every day
  - b) Every 3 months
  - c) Every 3 Minutes
  - d) Every 10 Minutes

## Alva's Institute of Engineering & Technology, Moodbidri Department of Computer Science & Engineering Feed Back Form **EIGHT DAYS Workshop**

On

## "BLOCKCHAIN TECHNOLOGY" 27TH SEP TO 04 OCT 2019

Thank you for participating in this workshop. Pleas	se respond	to AI	L the	questi	ons be	low to
help us to improve the curriculum, workshop materials, and	d the condu	ict of	the v	orksho	ps for	better
enhancements.	. dianawa	44		<b></b>		
1=strongly disagree 2=Disagree 3=neither agree nor N/A=Not applicable	disagree	4=A	gree	5=str	ongly	agree,
NAME of the Participant:	•••••	•••••		(0	Option	nal)
WORKSHOP CONTENT (Circle your response to ea	ch item.)					
1. This workshop has satisfied my expectations.	, 1	2	3	4	(5)	N/A
2. The exercises have helped me to learn Applications of	of Blockch	ain.				
	1	2	3	4	(5)	N/A
WORKSHOP DESIGN (Circle your response to each	item.)					
1. The workshop activities have stimulated my learning	interest ar	id ab	ility.		~	
	. 1	2	3	4	(5)	N/A
2. The activities in this workshop have given me su	ifficient p	ractio	ce an	d 100	% ha	nds-n
training exercises.					_	
	1	2	3	4	(5)	N/A
3. Now I am able to design & develop an effective algori	ithm for da	ata se	curit	y		e reicis
	1	2	3	4	(5)	N/A
WORKSHOP FACILITATOR (Circle your response to	o each iter	n.)	771.74	2247.1		
1. The Resource Person has been well prepared.	1	2	3	4 (	5	N/A
2. The Resource person has been knowledgeable and has	delivered	the c	onte	nt inta	ct.	
	1	2	3	4 (	<b>(5)</b>	N/A
3. The Resource person has covered all the topics und	der block	chain	- Di	stribut	ed Le	dger
Technology, crypto currency and Ethireum	1	2	3	4 (		N/A
4. Is workshop has been organized effectively?	1	2	3	4 (	$\simeq$	N/A
				1	/	



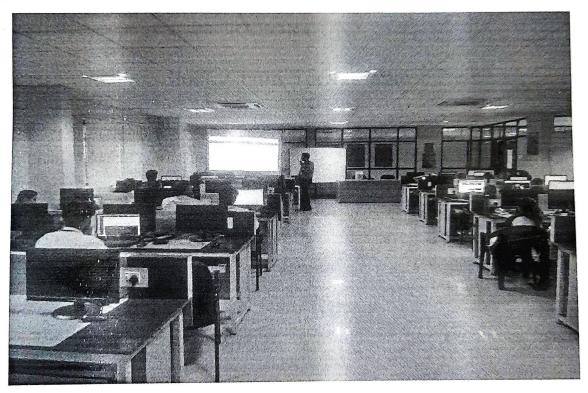
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## DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

#### REPORT ON

## **Block Chain Technologies**

Department of Computer Science and Engineering, AIET, Mijar organized a 8 days Certification Course/Workshop on "Blockchain Technologies" in Association with EMURGO Academics on 27<sup>th</sup> Sep to 4<sup>th</sup> Oct 2019. The workshop/certification course was inaugurated by the Principal Dr. Peter Fernandes, AIET, Dr. Praveen J Dean (Aca), Prof. Manjunath Kothari, H.O.D, Dept. CSE and all The HODs of various departments and all staff members and student volunteers were also present during the inauguration function and also total 47 participants had been attended this certification course.



EMURGO Global is the official commercial and venture arm of the Cardano project, registered in Tokyo since June 2017 and in Singapore since May 2018. Being a pioneer in the space of Blockchain, EMURGO enables pragmatic solutions by leveraging "3rd Generation Blockchain

Coordinator

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## **DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**

Technology- Cardano". We work closely in a unique affiliation with IOHK, to promote Cardano's adoption and growth of its ecosystem, globally by building, investing, and advising projects and organizations that adopt Cardano's decentralized blockchain ecosystem. With a strong presence in Singapore, New York, and Indonesia; we have now recently set foot in India.

#### Goal of the course was

- Getting the participants familiar with the blockchain technology and understanding what makes it revolutionary.
- ♦ After the workshop, participants should be able recognize the advantages of the blockchain technology as well as its limitations.
- Besides that, they should be able to roughly asses how the block chain technology might be implemented in their company/organization, what benefits it would bring, what challenges would arise and what resources would be needed for the implementation.



Coordinator

HOD

Dept. Of Computer Science & Engineering Alva's Institute of Engg. & Technology Mijar, MOODBIDRI - 574 225



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## Department of Computer Science & Engineering

## Summary Report of Add-on / Certificate program with its Outcomes

Academic Year: 2019-2020 Duration: 27<sup>th</sup> Sep 2019 to 4<sup>th</sup> Oct 2019

Title of the Course: Blockchain Technologies

Resource Person: Mr. Sudeep Sagar, EMURGO Academics.

Department of Computer Science and Engineering, AIET, Mijar organized a 8 days Certification Course/Workshop on "Blockchain Technologies" in Association with EMURGO Academics on 27<sup>th</sup> Sep to 4<sup>th</sup> Oct 2019. Mr. Sudeep Sagar, EMURGO Academics was the resource person for the session. He explained about the Basics of Block chain, Usage of SHA256 encryption techniques, Defense against the attacker, Creating block chains etc.

Totally 47 students of CSE department were benefited by the course were benefitted from this course and were able to

- Understand how blockchain systems (mainly Bitcoin and Ethereum) work,
- · To securely interact with them,
- Design, build, and deploy smart contracts and distributed applications,
- Integrate ideas from blockchain technology into their own projects.

HOD H. O. D.

Dept. Of Computer Science & Engineering Alva's Institute of Engg. & Technology Mijar, MOODBIDRI - 574 225





## Foundations of Blockchain

This is to certify that Mr/Ms	V ANJANA	APAI	_ has actively participated
in Ignitive	Labs - Foundatio	ns of Blockch	ain
conducted by EMURGO Academy	in Alva's Institute	Of Engineeri	ng & Technology, Mangalore
from _	<b>27-Sep-19</b> to .	04-Oct-19	

We wish the student a successful Blockchain career.

Head Academic Council



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