# **REGISTRATION FORM**

# 5 Day AICTE Sponsored Workshop on "Block Chain Technology"

(Dec 16th, 2019 to Dec 20th, 2019)

| Name of Participant   |
|---|
| Dept :  |
| Gender :  |
| Designation:  |
| Qualification:  |
| Organization:   |
|   |
| Mobile No   |
| Email:  |
|   |
| I agree to abide by the rules and the regulations governing the Workshop. |
| Place:  |
| Date: Signature of the Participant  |
| Mr./Ms./Dr./ is a student/employee of our Institution and is permitted    |
| to attend the programme.  |
|   |
|   |
| Signature of the Head of (applicant's) Institution and Seal               |
|   |
| Place:<br>Date:   |

Accommodation: Limited number of room in NITK Guesthouses and Hostels available on First Come First Served basis. Cost of boarding and lodging shall be borne by the applicant. Please note that no TA/DA shall be paid for this event by NITK. Course participants may have to deposit complete amount expected for their stay with Guest House/Hostel on arrival.

Venue: Dept. of Information Technology NITK Surathkal Mangalore- 575025.

Address for Communication

Dr. Bhawana Rudra

Department of Information Technology National Institute of Technology, Karnataka Surathkal, Mangalore – 575 025

E-mail: abct.it.nitk@gmail.com

Contact: Ph. 0824 – 247 3560

### **Course Contents**

- Introduction to Block chain and Cryptography
- Introduction to Cryptocurrencies and Bitcoin
- Ethereum and its applications
- Enterprise Blockchain (Corda)
- Blockchain in Cyber Security
- Scaling Blockchain with state channels
- Challenges in Blockchain Platforms



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(Dec 16<sup>th</sup>, 2019 to Dec 20<sup>th</sup>, 2019)



# COORDINATOR Dr. Bhawana Rudra

Dept. of Information Technology, NITK



Organized By

Department of Information Technology National Institute of Technology, Karnataka Surathkal, Mangalore – 575 025

#### **About NITK Surathkal**

NITK Surathkal is a premier institution engaged in imparting quality technological education and a broad range of research, development and consultancy activities. NITK has carved a niche for itself among the best technical institutes in India and is consistently ranked among the top 10 technological institutes.

## **Department of Information Technology**

Department of Information Technology was established in June 2000. The department offers undergraduate course B.Tech. in Information Technology, Post Graduate course M.Tech. in Information Technology, M.Tech. by (Research) and Doctoral Program (Ph.D) Current research activities of the department include Data Mining, Web services, Distributed Computing, Semantic Web Technology, Natural language Processing, Software Aging, Virtualization, Soft Computing, Wireless Sensor Networks, Computer Networks, Network and Cyber Security, Information Security, Internet of Things (IoT), Affective Computing, Big Data Analytics, Cloud/Edge/Fog Computing, Cloud Security, Databases, Healthcare Informatics, High Performance Computing, Information Retrieval, Social Multimedia/Social Network Analysis, Software Engineering, Blockchain Technologies, Future Internet Architecture, Mobile Software Engineering, Deep Learning Applications.

## How to Reach NITK Surathkal

NITK is located in Surathkal on the scenic shores of the Arabian Sea, about 20KM north of the city of Mangalore and is well connected by Air, Rail and Road. The nearest domestic/international airport is situated at Bajpe (about 10KM from Mangalore) and the nearest railway station is Surathkal (3 KM). The NITK Campus is situated right on National Highway NH66 with very good bus connectivity from Mangalore, Udupi etc.

### **About the Program**

Blockchain is a leading software platform for digital assets. It is a data structure used to create a decentralized ledger and is composed of blocks in a serialized manner. A block contains a set of transactions, a hash of the previous block, timestamp, block reward, block number, and so on. It can be used for a variety of applications like financial transactions, smart properties, credential management, internet-of-things, supply chain management and even decentralizied autonomous organizations (DAO).

There has been a hype about blockchain technology, cryptocurrency and contracts and governments and industries have shown great interest in developing and deploying this technology. The Workshop explains whether the hype is justified or not. Where Blockchain can be used and cannot be used efficiently, various applications can can use blockchain for secure communication/ transaction. Can we design a scalable, robust, secure blockchain? How vulnerable are current designs and how can they be mitigated? What are the cryptographic issues that need to be addressed?

The FDP covers finding answers to the above problems and much more. This explains the various concepts of Cryptography, Distributed System, Cryptocurrency, Blockchain Mining, Advances in Blockchain and its Applications, Blockchain Software and their uses, Practical Demonstration on Ethereaum and so on.

# **Objective of the Program**

This program contains not only theory but hands-on sessions in the area of security and Blockchain. The course is designed for theory, use–case demonstrations, and research oriented discussion, which shall be helpful in understanding the of the process and along with practical implementation using Ethereaum

#### Course Deliverables:

This Program will provide an understanding of various methodologies, techniques, and tools related to Blockchain Technology.

#### Resource Persons

Experts from Industry, Academia, R&D Organizations will deliver expert talks to make participants aware of the Block Chain Security along with various applications and Research Challenges along with Practical Sessions.

#### **General Information**

- Eligibility: The programme is open to Faculty and Ph.D Students of AICTE approved Engineering and Technology Colleges.
- Maximum Number of Participants: 50 (Selection on the basis of first come first served)
- Registration Fee: Nil.
- Deadline: Completed applications should reach the Coordinators on or before 08th December 2019.

E-mail the scanned copies of the filled and duly signed application form to "abct.it.nitk@gmail.com"

## **Important Dates**

Last Date for Receipt of Applications:

08th December 2019

Intimation of Selection by email:

10th December 2019