PREAMBLE

With increasing the amount of digitalization, the complexity of systems is increasing, which is leading to reduction in trust and accountability among parties. Blockchain can ensure the visibility, transparency & trackability of business activities. Blockchain is probably the most complex and least misunderstood concept among all digital trends, but potentially, it is most impactful. Blockchain is a growing list of records, which is decentralized, distributed ledger that records the provenance of digital asset, Blockchain technology is also known as distributed ledger technology (DLT). Blockchain is complicated because digital assets are distributed instead of copied or transferred, the asset is decentralized, allowing full real time access, and a transparent ledger of changes preserves integrity of the document, which creates trust in the asset. The whole point of using Blockchain in a network to let people trust one another, share valuable data in secure and valuable way. Blockchain has nearly endless amount of uses cases across every industry, for example, Blockchain can be used to track fraud in finance, securely share patients' medical records between healthcare professionals, protect intellectual properties in business, music copy rights for artists, managing land records, end to end supply chain monitoring etc. Currently, Blockchain is in infant stage like internet in early 2000 and it has potential to become next big thing in industry. This the right time for industry experts to evaluate Blockchain technology across their complex challenges and requirements.

TOPICS

- Intro to bitcoin and Blockchain, IOT
- Distributed ledger technology
- Blockchain architecture
- Components of Blockchain in ecosystem
- Blockchain mining & Consensus mechanisms
- Cryptography and Blockchain algorithms
- Cyber Security in Block chain
- Blockchain development on hyper ledger Fabric
- Creating smart contracts
- Blockchain Technology and Its Implication in AI/ML Security
- Blockchain in supply chain and Automobiles
- Blockchain in Healthcare
- Blockchain in Financial
- Blockchain in Logistics

IIITD&M KANCHEEPURAM

The course will be organized by Indian Institute of Information Technology Design & Manufacturing (IIITD&M Kancheepuram), Chennai. It is a Centre of Excellence for technical education and research established in 2007 by the Ministry of Human Resource Development, Government of India. To pursue design and manufacturing oriented engineering education and research and for promoting the competitive advantage of Indian products in global markets. The institute is located on a 51 acre campus on the outskirts of Chennai, off the Vandalur-Kelambakkam road. The Institute is presently offering UG, PG, and Ph. D programmes in Computer Engineering, Electronics and Communication Engineering and Mechanical Engineering.

AICTE TRAINING & LEARNING ACADEMY (ATAL)

The objective of the academy is to train Faculties, students and research scholars in recent technological developments. In addition, the training will be mandatory for new teachers from 2019 and it will be necessary for existing teachers and assistant teachers while applying for promotions. AICTE is statutory body established in November 1945. It comes under aegis of Department of Higher Education, Ministry of Human Resources Development. It is national-level council for technical education responsible for planning and coordination of technical education management of education system in the country. It is headquartered in New Delhi.

COORDINATOR

Dr.P.Kalpana received Ph.D. degree in Operations and Supply Chain Management from Indian Institute of Technology Madras, India in 2013. She received her Master Degree in Industrial Engineering from PSG College of Technology, Coimbatore, India in 2007. She was working as Operations Research Consultant in Ramco systems Chennai, from 2013 to 2016. She Also associated with Ford Motor Private Limited as Deputy Manager (Manufacturing and Supply Chain Analytics), Chennai from 2016 to 2019. She also has 2.5 years of teaching experience before joining as a full time research scholar at IIT Madras. Since April 2019, she has been an Assistant Professor in Indian Institute of Information Technology, Design and Manufacturing, Kancheepuram, Chennai, India. Her Research interests include solving interesting problems in the area of Supply Chain Management, Scheduling, Logistics & Transportation, Inventory planning using mathematical modeling, Algorithms, heuristics, Meta heuristics and simulation techniques, Smart Supply Chain management/IoT and Blockchain, Advanced Optimization Techniques, Data Analytics/AI and ML.

Targeted Participants

The programme is open to the faculty members of the AICTE approved institutions, research scholars, PG scholars, Government officers/personnel, bureaucrats, technicians, researchers, practitioners, industry personnel, and staffs of IIITDM Kancheepuram, Chennai.

Resource Persons

The resource persons for the FDP are from IITs/NITs/IIITs/central universities/other reputed institutions/industries and host institution IIITDM Kancheepuram, Chennai.

Registration Fee and Timing

There is no registration fee from any participant. The FDP timings are from 9:00 AM to 04:30 PM on all days.

Selection

Selection is on "first come first serve" basis. Only 200 seats are available for the FDP. Participants will be selected from among the applicants to ensure representation from more institutions across the country.

Certification

A test shall be conducted by coordinator at the end of the program. The certificate shall be issued to those participants who have attended the program with 80% attendance and scored minimum 60% marks in the test. Also, submission of feedback on the ATAL portal is also mandatory to get the certificate.

How to Apply

Interested participants are required to register at AICTE ATAL web portal (https://atalacademy.aicte-india.org) at the earliest.

Last date for Registration is **25th November 2021**.

Contact Details

Dr. P.Kalpana: kalpana@iiitdm.ac.in,
Contact: 9942904718, 044 2747 6386

AICTE Training and Learning (ATAL) Academy Programme on Blockchain Technology and its Applications

Organizing Committee

Coordinator: Dr.P. Kalpana, Asst. Professor

Organized by

Indian Institute of Information Technology Design and Manufacturing, Kancheepuram
An Institute of National Importance
(Under Ministry of HRD, Govt. of India)
Chennai– 600127, Tamilnadu

AICTE Training and Learning (ATAL) Academy Programme on Blockchain Technology and its Applications

6th Dec 2021 - 10th Dec 2021

Programme Schedule

Date & Day	Time				
	9.00 am to 11.15 am	**Tea break**	**11.30 am to 1.30 pm**	**Lunch break**	**2.30 pm to 4.30 pm**
6/12/2021 (Monday)	**Session 1** Inauguration and Intro to bitcoin and Blockchain, IOT		**Session 2** Distributed ledger technology		**Session 3** Blockchain architecture
7/12/2021 (Tuesday)	**Session 4** Components of Blockchain in ecosystem		**Session 5** Blockchain mining &Consensus mechanisms		**Session 6** Cryptography and Blockchain algorithms
8/12/2021 (Wednesday)	**Session 7** Cyber Security in Block chain		**Session 8** Blockchain development on hyper ledger Fabric		**Session 9** Blockchain Technology and Its Implication in AI/ML Security
9/12/2021 (Thursday)	**Session 10** Creating smart contracts		**Session 11** Blockchain in supply chain and Automobiles		**Session 12** Blockchain in Healthcare
10/12/2021 (Friday)	**Session 13** Blockchain in Financial		**Session 14** Blockchain in Logistics		**Session 15** Test, Feedback and Valediction