National Institute of Technology Tiruchirappalli

The National Institute of Technology (formerly known as Regional Engineering College) Tiruchirappalli, situated in the heart of Tamil Nadu on the banks of river Cauvery, was started as a joint and co-operative venture of the Government of India and the Government of Tamil Nadu in 1964 with a view to catering the needs of man-power in technology for the country. The college has been conferred with autonomy in financial and administrative matters to achieve rapid development. Because of this rich experience, this institution was granted Deemed University Status with the approval of the UGC/AICTE and Govt. of India in 2003 and renamed as National Institute of Technology. NITT was registered under Societies Registration Act XXVII of 1975. National Institute of Technology Tiruchirappalli is one of the 31 National Institutes of Technology established by the Government of India and ranks First among all the NITs in NIRF during three consecutive years. The institution offers Undergraduate Courses in ten branches and Post Graduate Courses in twenty-one disciplines of Science, Engineering & Technology besides M.S. (by Research) and Ph.D. in all the departments.

Website: https://www.nitt.edu

IEEE Student Branch - NITT

The world's leading professional organization for the advancement of technology has a local address at NIT, Tiruchirappalli. Through its global membership, the IEEE is a leading authority on areas ranging from aerospace systems, computers and telecommunications to biomedical engineering, electric power, and consumer electronics. Members rely on the IEEE as a source of technical and professional information, resources, and services. To foster an interest in the engineering profession, the IEEE SB NITT indulge in various technical and non-technical activities. Other important constituencies include prospective members and organizations that purchase IEEE products and participate in conferences or other IEEE programs. IEEE SB NITT has five technical society chapters viz, Computer Society(CS) chapter, Power & Energy Society(PES) chapter, Industry Applications Society(IAS) Chapter, Antennas & Propagation Society(APS) Chapter and Microwave Theory & Techniques Society(MTTS) Chapter through which events such as workshops, symposiums, conferences, technical webinars, etc., are conducted. IEEE SB NITT and its technical chapters encompasses undergraduate, postgraduate and Ph.D. Scholars from various departments.

Website: https://site.ieee.org/sb-nitt/
https://www.nitt.edu/home/students/clubsnassocs/academic/ieee/

Objective of the FDP

The objective of this FDP is to equip the participants with a technical knowhow on the various technologies pertaining to the revival of conventional power grid into smart power grid and with the insight of blockchain technology and its applications to smart grid.

Theme and sub-themes of the FDP

Theme: "Smart Grid Features and Blockchain Technology for Smart Grid"

The concept of smart grid has been introduced as a new vision of the conventional power grid to figure out an efficient way of integrating green and renewable energy technologies. In smart grid vision, a collection of existing and emerging technologies works together to achieve energy efficiency, automation and financial benefits in the production, transport, consumption of electrical energy and to obtain sustainable society. In this course, participants learn about the requirement for a smart grid in future. Further, they will be exposed to several modern and evolving technologies that can be applied in transforming the present electrical power grid into smart electrical power grid. The smart grid transforms the operation of the gird into decentralized architecture from its centralized form. In this scenario, blockchain technology, with its excellent features, makes it a promising application for smart grid paradigm. Smart contracts are gaining interest now a days amongst researchers. Hence, it is proposed to enrich the participants with the fundamentals of blockchain technology and its various use cases in smart gird operation.

As a whole, the workshop is planned to cover the following sub-themes:

1. Introduction to Smart Grid
2. Embedded Systems for Smart Grid
3. Microgrid Implementation and Control
4. Demand Side Management
5. Electrical Vehicles in Smart Grids
6. Communication Protocols for Smart Grid
7. Introduction to Blockchain Technology
8. Concepts of Blockchain Technology
9. Blockchain Technology for Smart Grid
10. Smart Contract Implementation

Resource persons from National Institute of Technologies, reputed academic institutions, industries and public sector organizations will be handling the technical sessions.

Online
Faculty Development Programme
on
"Smart Grid Features and Blockchain Technology for Smart Grid"

16th -20th November, 2020

Organized by

IEEE Student Branch NIT Tiruchirappalli

in association with
IEEE CS, IEEE PES & IEEE IAS Chapters

National Institute of Technology Tiruchirappalli

Registration Fees
(Inclusive of GST as applicable)

Category	Amount in Rs.
IEEE Members	750
Non – IEEE Members	1000

- ✓ The maximum number of participants will be limited to 60. Hence participants are advised to register early.
- ✓ Presentation material will be shared through G drive for limited period for downloading by participants.
- ✓ Hardcopy of the participation certificate will be sent to the postal address of the participants along with the Post Event Kit (PEK).

Registration & Payment Process

- Everyone willing to participate in the FDP must register by filling the Google Form on or before 08.11.2020, 05:00 PM (IST).
  https://forms.gle/zs3Nxyp8jVcHPFey8
- After filling the form, 60 participants will be shortlisted and intimated through mail on 09.11.2020 before 05:00 PM (IST).
- The shortlisted participants should pay the registration fee on or before 11.11.2020, 05:00 PM (IST).
- The second list of participants will be shortlisted (against the vacancy arising due to non-payment of the registration fee by the selected participants in the first round) and intimated through mail on 12.11.2020
- The shortlisted participants in the second round should pay the fee on or before 14.11.2020, 05:00 PM (IST)

Request for refund of registration fee will not be entertained.

Activity	Important Dates
Last date for registration	08th November 2020
First Selection List	09th November 2020
Payment Deadline	11th November 2020
Second Selection List	12th November 2020
Payment Deadline	14th November 2020
Final List of Participants	15th November 2020
FDP	16th -20th November 2020

Payment Guidelines

- ✓ Payment shall be made **ONLY** through SBI Collect (State Bank of India) or UPI ID.
- ✓ Cash / Demand Draft / Cheque / Pay Orders, etc. are **NOT ACCEPTED**.

Step-by-step procedure to make payment via SBI Collect:

- ✓ **Step-1:** Go to the link: https://www.onlinesbi.com/sbicollect/icollecthome.htm
- ✓ **Step-2:** Select the following from dropdown menu: State of Corporate / Institution: **Tamil Nadu** Type of Corporate / Institution: **Educational Institutions**
- ✓ **Step-3:** Select the following from dropdown menu: Educational Institutions Name: **IEEESB NITT**
- ✓ **Step-4:** Select the following from dropdown menu: Select Payment Category: **Registration Fee**
- ✓ **Step-5:** Provide all details of payment >> **Then submit**

Step-by-step procedure to make payment via UPI ID:

- ✓ **Step-1**: Goto any UPI payment App (BHIM, Gpay, PhonePe, etc.)
- ✓ **Step-2**: Click on New Payment.
- ✓ **Step-3**: Enter UPI ID (**ieeesb@sbi**) or scan the QR code given and verify that you can see the Merchant Name as 'DIRECTOR NIT TRICHY'.
- ✓ **Step-4**: Make the payment.

Contacts

For Event Related Queries

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For Payment Related Queries

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Who can apply?

Faculty members, Research Scholars and Industry Personnel

COORDINATORS

Dr. M. P. Selvan,
Associate Professor/EEE & IEEE SB Counsellor

Dr. B. Shameedha Begum,
Assistant Professor/CSE & IEEE CS Chapter Advisor

National Institute of Technology, Tiruchirappalli.