



**AICTE TRAINING AND
LEARNING (ATAL) SPONSORED
ONE WEEK WORKSHOP**

ON

**AI Solution for Optimum
Utilization of Power and Energy**

5TH – 9TH JULY, 2021

VENUE: NIT SRINAGAR

ORGANIZED BY



**AICTE TRAINING AND LEARNING
(ATAL) ACADEMY
&
DEPARTMENT OF ELECTRICAL
ENGINEERING, NATIONAL INSTITUTE
OF TECHNOLOGY SRINAGAR,
HAZRATBAL, SRINAGAR, INDIA
J&K-190006**

NIT Srinagar

National Institute of Technology, Srinagar (NITSRI) was established in 1960 as the Regional Engineering College (REC), Srinagar, Jammu and Kashmir, India. It was one of the first eight Regional Engineering Colleges established by Government of India during the first Five Year Plan (1956-61). It is governed by the National Institutes of Technology Act, 2007 which has declared it as Institute of National Importance. It is one of the 31 National Institutes of Technology (NITs) and as such is directly under the control of the Ministry of Education (MoE).

NIT campus is on bank of Dal Lake known as Srinagar Jewel. Also, most respected and beautiful holly place of Muslims called Hazratbal Shrine are nearby and walkable distance from campus.

Electrical Engineering Department

The Department of Electrical Engineering (EE) is one of the oldest departments since it was REC. The department runs undergraduate, Masters and PhD programs. The department has experienced and distinguished faculty with all of them having PhD from renowned institutes. The faculties are constantly engaged in research apart from teaching. There are ten fully equipped laboratories in the department catering to the needs of the students.

ATAL Academy

AICTE training and learning (ATAL) academy is established with the vision "to empower faculty to achieve goals of higher education such as access, equity and quality." AICTE is committed for development of quality technical education in the country by initiating various schemes launched by Govt. of India and Ministry of Human Resource Development. Training is required for increasing the knowledge and skills of faculty members and students to make them more employable to acquire global competencies.

Objectives

Artificial Intelligence (AI) is the most significant problem solving software tool in the globe. This is because of its widespread application in the fields of all streams of engineering and technology.

NIT Srinagar proudly announces one-week workshop on elementary level of AI application in power and energy systems. The objective of this workshop is to introduce and enhance the knowledge of AI based programming tool to achieve the optimum solution for multi-dimensional problems in the power grids, globally. Also, goal of this workshop is to help the Industrial person, researchers and faculty to learn practical implementation of AI on real world complex problems.

Who will attend the workshop?

This workshop provides opportunity to interact new way of knowledge. Hence, coordinators request targeted participants belonging to the following categories to register themselves for workshop.

- Scientist, Regular/ contractual faculty members and research scholars of the central and state government funded institutions, as well as AICTE approved private Universities /Institutions/Colleges.
- Regular/ contractual lecturers (10+2) of the central and state government funded, and private Colleges.
- Executives and employees from technical departments of various government organizations, PSUs and training institutes

Eligibility and Criteria

- **There is no registration fee from any participants.**
- Number of participants is limited to 200.
- Participants will be selected on first-come first-served basis.
- Participants apply for workshop through ATAL portal via following link: - Workshop ID: 1243

<https://atalacademy.aicte-india.org/login>

- E-certificate will be issued by ATAL AICTE to those participants who have attended the program with minimum 80% attendance and scored minimum 60% marks in the online Test which will be conducted at the end of the programme.
- The coordinator's decision will be final in the selection of participants.

Topics Covered

- Introduction to various AI techniques
- AI solution for smart and micro grid problems
- AI techniques for load forecasting
- AI techniques for Modern control strategies
- AI solution for rooftop PV panels
- AI solution for Electric vehicles
- AI solution for Economic load dispatch and Unit commitment
- AI solution for complex non-linear problems
- Various AI techniques for large data handling
- AI application in machine learning

Prerequisites

Basic and fundamental knowledge of electrical engineering and mathematics is required but not essential. Also, to understand the computer based algorithm of AI, basic knowledge of computer programming is highly beneficial.

Organizing Committee

CHIEF PATRON

Prof. (Dr.) Rakesh Sehgal
Director, NIT Srinagar

PATRONS

Dr. Abid Bazaz
HOD, Dept. Electrical Engineering

CO-PATRONS

Prof. (Dr.) Mairaj ud-din Mufti
Prof. (Dr.) Shamim Ahmad Lone
Prof. (Dr.) Abdul Hamid Bhat

ORGANIZING MEMBERS

Dr. Asadur Rahman, AP, EED
Dr. Neeraj Gupta, AP, EED
Dr. Farhad Ilahi Bakhsh, AP, EED
Dr. Ravi Bushan, AP, EED
Dr. Chilaka Ranga, AP, EED
Dr. Tabish Mir, AP, EED
Dr. Shoeb Hussain Buch, AP, EED
Dr. D V Siva Krishna Rao K, AP, EED
Dr. Hareesh Myneni, AP, EED

Coordinators



Prof. Aijaz Ahmad
(PhD, IIT Delhi)
Coordinator, EED
NIT Srinagar, J&K



Dr. Kushal M Jagtap,
(PhD, IIT Roorkee)
Assistant Prof.,
Coordinator, EED
NIT Srinagar, J&K
M. no.: 6005352412

Schedule

Timing	10:00 AM to 11:20 AM	11:20 AM to 11:30 AM	11: 35 AM to 1:00 PM	1:00 PM To 1:10 PM		2: 30 PM to 3:50 PM	3:50 PM to 4:00 PM
Monday 5 July 2021	Dr. Shekhar Kelapure, Consultant and Energy auditor	Discussion and doubt session	Dr. Ankush Sharma, EED, Assoc. Prof. IIT Kanpur	Discussion and doubt session	Lunch	Dr. Dheeraj Khatod, EED, Assoc. Prof. IIT Roorkee	Discussion and doubt session
Tuesday 6 July 2021	Er. Jagpravesh Verma, Executive engineer, SAIL	Discussion and doubt session	Dr. Anup Shukla, EED, Asst. Prof, IIT Jammu	Discussion and doubt session		Dr. V N Lal, EED, Asst. Prof, IIT BHU	Discussion and doubt session
Wednesday 7 July 2021	Dr. Sanjib Ganguly, EED, Assoc. Prof. IIT Guwahati	Discussion and doubt session	Dr. Ranjan Behera, EED, Assoc. Prof. IIT Patna	Discussion and doubt session		Dr. Rohit Bhakar, EED, Assoc. Prof, MNIT Jaipur	Discussion and doubt session
Thursday 8 July 2021	Dr. Rajesh Kumar, EED, Professor MNIT Jaipur	Discussion and doubt session	Dr. Vignesh V EED, Asst. Prof, IIT Tirupati	Discussion and doubt session		Dr. Nidul Sinha, EED, Professor NIT Silchar	Discussion and doubt session
Friday 9 July 2021	Dr. Rohit Bhakar, EED, Assoc. Prof, MNIT Jaipur	Discussion and doubt session	Dr. Dhammapal Sahebrao Bhamare, MBBS, MD Spiritual talk	Discussion and doubt session		Quiz and Valedictory function	