

# AICTE TRAINING AND LEARNING (ATAL) ACADEMY SPONSORED ONLINE FDP

On

***“Emerging Frontiers in Energy, Climate and Sustainability”***

***Patron***

**Prof. (Dr.) R. M. Tugnayat**  
(Principal, GEC Samastipur)

***Coordinator***

**Dr. Dipak Kr. Mandal**  
(HoD-ME & Dean, GEC Samastipur)

***Co-coordinator***

**Dr. Vaishali**  
(Asst Prof., ME, GEC Samastipur)



**Organized by:**

**Department of Mechanical Engineering**  
**Government Engineering College**  
**Samastipur**

**(Under Science Technology and Technical Education  
Department)**

**08<sup>th</sup> September to  
13<sup>th</sup> September, 2025**

## ***LIST OF SPEAKERS***

- Prof. Joyashree Roy, Asian Institute of Technology, Thailand
- Prof. Erdem Cuce, Recep Tayyip Erdogan University, Turkey
- Prof. Himadri Chattopadhyay, Jadavpur University, India
- Prof. Sudipta De, Jadavpur University, India
- Dr. Santi Pada Gon Chaudhuri, Chairman, Energy Expert Committee, Govt of India. Former Special Secretary, Govt of West Bengal, India
- Mr. Abhik Roy Chowdhury, Principal Consultant, Lotus Wireless Technologies (India) Pvt. Ltd, India
- Mr. Nilanjan Bose, GM, Cenergist Energy Private Limited, India
- Prof. Abdus Samad, Indian Institute of Technology, Madras, India
- Prof. Akshoy Ranjan Paul, MNNIT, Allahabad, India
- Dr. Duke Ghosh, Partner and Researcher, Global Change Research, India
- Mr. Dipta Sundar Mallick, Director, Development Consultants Private Limited, India
- Mr. Barun Kr. Basak, Ex. GKW, and Nippon Denro (GM), India
- Dr. Tanay Chattopadhyay, Project and Planning (Solar cell), Bidyut Unnayan Bhaban, India

## **CONTACT PERSONS:**

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**Registration Link-**

**<https://atalacademy.aicte.gov.in/login>**

# Emerging Frontiers in Energy, Climate and Sustainability

08<sup>th</sup> September to 13<sup>th</sup> September, 2025

## 1 About the FDP

In an era of unprecedented environmental challenges and rapid technological advancements, the need for informed and proactive approaches to energy management, sustainability, and climate action has never been more critical. The Faculty Development Programme (FDP) on “Emerging Frontiers in Energy, Climate and Sustainability” is strategically designed to address these pressing issues by offering educators, researchers, and professionals a deep dive into the latest developments and practices in these vital areas.

This FDP aims to bridge the gap between theoretical knowledge and practical application, providing participants with a thorough understanding of current trends, innovative technologies, and effective strategies in energy and climate management. By focusing on both foundational concepts and emerging paradigms, the programme seeks to empower attendees with the expertise needed to contribute meaningfully to the global effort of tackling climate change and promoting sustainable development.

Throughout the workshop, participants will engage with a diverse range

of topics and gain valuable insights from leading experts in the field. The sessions are designed not only to enhance theoretical understanding but also to offer practical tools and methodologies that can be applied in real-world scenarios. The interactive nature of the FDP will encourage collaborative learning and facilitate discussions on the application of advanced paradigms in various contexts.

## 2 About the Institution

Government Engineering College, Samastipur is an engineering college under Department of Science Technology and Technical Education, Bihar. The college is spread over an area of 19 Acres at near Sarairanjan, Narghoghi Block, Samastipur, Bihar. This college is affiliated with Bihar Engineering University. It was established in 2019. The college provides six streams of Bachelor of Technology (B.Tech.) courses, each with an annual intake of 60 students.

- Civil Engineering
- Mechanical Engineering
- Electrical Engineering
- Electronics & Communication Engineering
- CSE (Cyber Security)
- CSE (AI & ML)

## 3 Eligibility Criteria

The faculty members, research scholars & PG scholars of the AICTE approved institutions and industry personnel. A test shall be conducted at the end of the program. The certificates shall be issued to those participants who have attended the program with **minimum 80% attendance and scored minimum 70% marks** in the test.

### Topics to be delivered

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|--|--|---|
| ➤ Cutting Edge Renewable Energy Technologies | ➤ Climate Change Science and Impacts                 | ➤ Industrial Energy Efficiency                |
| ➤ Sustainable Energy Systems                 | ➤ Advanced Climate Modeling                          | ➤ Future Energy Scenarios and Pathways        |
| ➤ Energy Storage and Smart Grids             | ➤ Sustainable Urban Development                      | ➤ Circular Economy and Resource Management    |
| ➤ Energy Storage Innovations                 | ➤ Education and Capacity Building for Sustainability | ➤ AI and Big Data for Environmental Solutions |
|  | ➤ Behavioral Approaches to Sustainability            |   |