Chief Patron
Prof. Dr. Mohammad Rafiqul Islam
Vice-Chancellor, IUT

Resource Persons

Md. Ruhul Amin
Ph.D., MIEEE, FIEB (Life), Commonwealth Fellow
Professor, Dept. of EEE, IUT, Bangladesh

Mohammad Al Hasan
Ph.D., Professor, Computer Science
Indiana University–Purdue University Indianapolis (IUPUI), USA.

Dr. Md. Ziaur Rahman Khan
Professor, Dept. of EEE, BUET, Bangladesh

Razzaqul Ahshan
Ph.D., SMIEEE, Associate Professor
Dept. of ECE, Sultan Qaboos University, Oman

Shamsul Arefeen
Ph.D., Assistant Professor, Division of Environmental &
Renewable Resources, Texas Tech University, USA.

Md. Intekhab Alam
Managing Director, Novelty Energy Limited, Bangladesh

Dr. Asm Shihavuddin
Chairman and Professor, Deptartment of EEE,
Green University, Bangladesh

Dr. Adnan Anwar
Senior Lecturer, Deputy Director (PG Cyber Security Courses)
Deakin University, Australia.

For Whom

Faculty members in the universities who intend to conduct research related to sustainable energy and the use of AI in this field. The short course should also be helpful for enthusiasts and technical persons by strengthening their profile.

The Short Course will be held on the beautiful campus of the Islamic University of Technology (IUT) at Board Bazar, Gazipur, about 13 km north of the Hazrat Shahjalal International Airport, Bangladesh. Additional information about the IUT campus is available on the website.

Course Coordinator
Md. Arif Hossain
Assistant Professor, EEE, IUT
sceee@iut-dhaka.edu

Visa Information

Citizens of most countries require a valid visa to enter Bangladesh.

For details please visit:
www.mofa.gov.bd/missions-officers

Reporting

Time: Oct 31, 2024
8:00 AM
@ EEE Department, IUT

Participants
The maximum limit of the number of participants is 40. Early applications are highly encouraged.

Accommodations
The participants will be provided with furnished accommodation and food at IUT campus.

Course Officials
Prof. Dr. Mohammad Rakibul Islam, Head, EEE, IUT
Md. Arif Hossain, Assistant Professor, EEE, IUT
Mr. Asif Newaz, Lecturer, EEE, IUT
Mr. Ahmad Shafiullah, Lecturer, EEE, IUT
Mr. Arefin Rabbi Emon, Lecturer, EEE, IUT
Mr. Ashraful Islam Mridha, Lecturer, EEE, IUT
Mr. A. K. M. Rakib, Lecturer, EEE, IUT
Mr. Shadman Shahriar Sharar, Lecturer, EEE, IUT
Ms. Wasifa Rahman Rashmi, Lecturer, EEE, IUT
Ms. Maisha Farjana Etu, Lecturer, EEE, IUT

Registration
Deadline : Oct 23, 2024
For online registration please visit:
https://forms.gle/7WjDdnqvabM1FiES9

QR

Registration Fee:
TK 8000 for local participants
Account No.: 4018 085407 430

USD 200 for expatriate participants
Bank Transfer is payable to --

Account Name: IUTFCAD
Account No: 4004 099724 030
SWIFT CODE: ABBLBDDH 004
AB Bank Ltd., Motijheel Branch, 8, Rajuk Avenue, Dhaka, Bangladesh

Short Course
Oct 31- Nov 02, 2024

APPLICATION OF AI IN SUSTAINABLE ENERGY TRANSITION FOR THRIVING TOWARDS A SMART SOCIETY

Islamic University of Technology (IUT)
Board Bazar, Gazipur - 1704, Bangladesh

sceee@iut-dhaka.edu

www.iutoic-dhaka.edu

+880-1911970358

About us

Every year, Islamic University of Technology (IUT) arranges intensive short courses to support the social and economic elevation of OIC member states. The aim of these short courses is to develop human resources in different branches of science, engineering, and technical education. Expert resource persons from renowned Institutions of OIC member states as well as from different parts of the world share their valuable knowledge in the short courses. With the above aim, the Electrical and Electronic Engineering (EEE) Department of IUT is going to organize a short course in 2024. The title of the short course is:

"Application of AI in Sustainable Energy Transition for Thriving Towards a Smart Society"

Course Objectives

1. To explore the vast potential, features, and challenges of applying artificial intelligence (AI) to sustainable energy transition for advancing towards a smarter society.

2. To enhance employment opportunities in the AI-driven sustainable energy sector by fostering a deeper understanding of its principles.

Course Outline

The application of AI in sustainable energy transition involves leveraging advanced algorithms to optimize energy generation, distribution, and consumption for a more efficient and environmentally friendly society. This course will delve into the intersection of AI and sustainable energy systems, enabling novel approaches to energy management that were previously unattainable. By harnessing AI, we can transform energy systems to be more adaptive, responsive, and sustainable, ultimately leading to smarter and greener societies. The course will cover topics ranging from AI-driven energy forecasting and optimization to grid management and smart city initiatives.

Participants will also gain experience with relevant AI tools and simulations, facilitating a comprehensive learning experience. Participants will engage in case studies highlighting successful AI applications in sustainable energy projects worldwide, gaining insights into real-world implementations and best practices. Through collaborative projects and discussions, participants will develop practical skills in leveraging AI for sustainable energy solutions, preparing them to drive innovation in the transition towards a smarter and more sustainable society.

Topics to be Covered

1. Fundamental knowledge of renewable resources including working principles, challenges & possible solutions
2. Hydrogen production and grid connectivity
3. Practical demonstration of solar PV system using Prova Simulator
4. Uncertainty modeling and load forecasting
5. Energy Auditing
6. Cyber security for critical infrastructure
7. AI/Machine learning
8. AI and Renewables

The medium of instruction will be English

Course Outcome

By the end of the course, participants will attain cutting-edge knowledge in applying AI to sustainable energy systems, empowering them to conduct high quality research and bolster their professional profiles within this burgeoning field.

Organized By-

Department of Electrical and Electronic Engineering (EEE)
Islamic University of Technology (IUT)
Organisation of Islamic Cooperation (OIC)