Resource Persons

Dr. Rakibul Hasan Sagor
Professor, Department of EEE, IUT, Bangladesh

Dr. Khurram Karim Qureshi
Professor, Electrical Engineering
King Fahd University of Petroleum & Minerals, Saudi Arabia

Dr. Md Zunaid Baten
Professor, Department of EEE
Bangladesh University of Engineering and Technology (BUET)

Dr. Mainul Hossain
Associate Professor, Department of EEE
University of Dhaka, Bangladesh

Dr. Abu S. M. Mohsin
Associate Professor, Department of EEE
Brac University, Bangladesh

Dr. Sajid Muhaimin Chowdhury
Associate Professor, Department of EEE, BUET

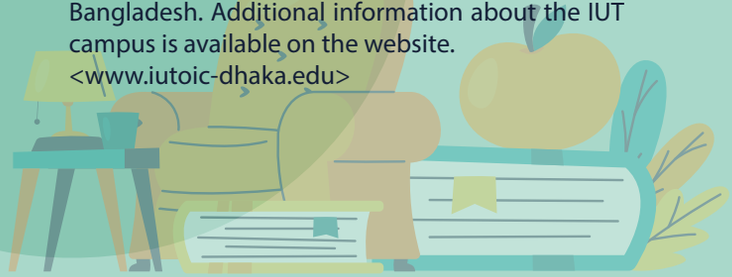
Dr. Zabir Ahmed
Assistant Professor, Department of EEE, BUET

Md. Omar Faruque
Assistant Professor (On - Leave), Department of EEE, IUT
Ph.D. candidate, McGill University, Canada

For Whom

Faculty members in the universities who intend to conduct research related to next generation photonics. 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. <www.iutoic-dhaka.edu>



Course Coordinator

Mr. Fardeen Hasib Mozumder
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 29, 2025
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. Syed Iftekhar Ali, Head, EEE, IUT
Mr. Fardeen Hasib, Assistant Professor, EEE, IUT
Mr. Asif Newaz, Lecturer, EEE, IUT
Mr. Ashraful Islam Mridha, Lecturer, EEE, IUT
Ms. Wasifa Rahman Rashmi, Lecturer, EEE, IUT
Mr. Abdullah Taharat, Junior Lecturer, EEE, IUT
Ms. Anika Rahman Habiba, Junior Lecturer, EEE, IUT
Mr. Ahmed Jawad Rashid, Junior Lecturer, EEE, IUT

Registration

Deadline : Oct 23, 2025
For online registration please visit:
https://forms.gle/jJJzwy5npdpe1pC37

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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

On

NEXT-GEN PHOTONICS: EMERGING CONCEPTS AND PERSPECTIVES

Oct 29 - 31, 2025

Islamic University of Technology (IUT)
Board Bazar, Gazipur - 1704, Bangladesh
sceee@iut-dhaka.edu
www.iutoic-dhaka.edu
+880-1886995444

Introduction

Each year, the Islamic University of Technology (IUT) organizes intensive short courses to contribute to the social and economic development of OIC member states. Established as an international centre of excellence, IUT is dedicated to advancing education, research, and innovation in engineering, science, and technical fields, while also fostering collaboration among OIC countries.

The Department of Electrical and Electronic Engineering (EEE) at IUT is recognized for its strong academic programs, cutting-edge research, and active engagement with industry. Each year, the department organizes a short course on a frontier topic in the field of electrical and electronic engineering. Renowned experts from leading institutions within OIC countries and around the world participate as resource persons, sharing their valuable knowledge and insights.

In line with this initiative, the department is set to host a short course in 2025 titled:

"Next-Gen Photonics: Emerging Concepts and Perspectives"

Course Outline

This short course provides a comprehensive introduction to fundamental and emerging concepts in photonics, with an emphasis on applications in healthcare, renewable energy, and advanced computing technologies. The curriculum integrates the physics and engineering of photonic devices with practical considerations in solid-state photonic systems, equipping participants with both theoretical knowledge and applied perspectives.

Through engagement with recent advances in inverse design, biosensing, solar energy, and spintronics, participants will gain an understanding of how photonic technologies are being leveraged to address pressing global challenges. The course will address the following thematic areas:

1. Photonics for energy, devices, and biology: AI-driven Innovations.
2. Group III Nitride light emitting devices: from physics to engineering.
3. Photonics and MEMS for next generation biomedical interfaces.
4. High-sensitivity, real-time biomolecule detection via optical waveguide-based sensing.
5. Emerging nanoscale electronic and optoelectronic devices for energy-efficient applications.

Course Objectives

1. To provide a strong foundation in fundamental and advanced photonics concepts relevant to research and practical applications.
2. To explore the integration of photonics with emerging technologies like AI, MEMS, and quantum systems for innovative solutions.
3. To equip participants with knowledge of diversified photonic applications in health, energy, and computing for impactful research and development.

The medium of instruction will be English

Course Outcome

Participants will gain foundational and advanced knowledge in photonics, enabling them to explore its applications in different areas and pursue impactful research in emerging optical technologies.

Organized By-

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