

**Department of Electrical and Electronic Engineering (EEE)
Bangladesh University of Engineering and Technology (BUET), Dhaka**

M.Sc./M.Engg Admission, October 2024

Notice for Applicants-05

**Area of Research and Research Keywords
Of Faculty Members**

Name of the faculty	Area of research (EEPS, EP, CSP)	Research keywords
Dr. S. Shahnawaz Ahmed		
Dr. Md. Saifur Rahman	EEPS, CSP	(Off grid Energy Generation, Battery Technologies, Smart Grid) (Spectral Analysis, Wireless Communication, IoT Signal Transmission and Reception)
Dr. Pran Kanai Saha		
Dr. Quazi Deen Mohd Khosru	EP	Plasmonics, Nanoelectronic and Nanophotonic Materials/Devices
Dr. Md. Shafiqul Islam	EP	Nanoelectronic Materials and Devices, High-power Devices
Dr. Md. Kamrul Hasan		
Dr. Md. Aynal Haque	CSP	Biomedical signal processing, image processing and instrumentation
Dr A. B. M. Harun- Ur-Rashid		
Dr. Sharif Mohd. Mominuzzaman		
Dr. Mohammad Jahangir Alam	EEPS, EP	
Dr. Md. Shah Alam	CSP, EP	Plasmonics, metamaterials
Dr. Md. Ziaur Rahman Khan	EEPS	
Dr. Mohad. Imamul Hassan Bhuiyan	CSP,EEPS,EP	Biomedical signal analysis; image classification, denoising and segmentation; SOC and SOH prediction for BMS; Deep learning; Photonics

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Name of the faculty	Area of research (EEPS, EP, CSP)	Research keywords
Dr. Shaikh Anowarul Fattah	CSP, EEPS	Generative AI, Machine/Deep Learning, Biomedical Engineering, Computer vision, Robotics, Demand/load prediction and renewable integration For Details: https://eee.buet.ac.bd/people/faculty/dsaf , https://scholar.google.com/citations?user=qDG3vBUAAAAJ&hl=en
Dr. Md. Nasim A. Dewan	EP	Modelling of RF Plasma and Plasma Systems
Dr. Muhammad Anisuzzaman Talukder	EEPS, EP, CSP	AI-powered assessment of electric vehicles, Digital twin of Li-ion batteries, innovative hydrogen energy generation technology, quantum nanophotonics-based AI-powered 3D imaging techniques
Dr. Celia Shahnaz	CSP, EEPS	Deep Learning. Generative AI, Federated Learning, Biomedical signal Processing, Speech Processing, Robotics, AI driven smart grid and renewable Energy, For details: https://eee.buet.ac.bd/people/faculty/dcs , Google Scholar Page: https://scholar.google.com/citations?user=gwrHyr8AAAJ&hl=en
Dr. Mohammad Ariful Haque	CSP	Generative AI, Reinforcement learning, Efficient Deep learning
Dr. Abdul Hasib Chowdhury		
Dr. Farseeem Mannan Mohammedy	EEPS, EP	Energy Modeling, RE issues; Mid-IR sensors and Optoelectronic devices.
Dr. Mohammad Faisal	CSP, EP	Ultra-High Speed Fiber-optic communication, Free Space Optical Communication, Underwater optical wireless communication, 5G Antenna Design, Optical Biosensor, Ultrafast optics, Photonic devices and waveguides
Dr. Md. Forkan Uddin	EEPS, CSP	Smart Grid Demand Response, EV and Renewable Integration to Smart Grid, 6G Communications, Unmanned Aerial Vehicle Communications, RIS and Cell Free Communications
Dr. Lutfa Akter	CSP	RedCap, Digital Twin, Cognitive Radio, 6G, Deep Learning, RADAR, Satellite Communication, V2X Communication

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Dr. Md. Kawsar Alam	EP	2D materials, DFT, nanoelectronics, Material properties
Dr. Md. Zahurul Islam	EP, EEPS	Nanophotonics and plasmonics: Materials, Devices, Systems, AI-Enabled Inverse Design Power and Energy: Emerging battery Technologies, Green Hydrogen production
Dr. Apratim Roy	EP	Micro and nanoelectronics, Radio frequency architectures
Dr. Mahbub Alam	EEPS, EP	Topological NanoFET, 2D and Topological Materials, Biosensors, Wearable and flexible electronics, Electric Vehicle
Dr. Ahmed Zubair	EEPS, EP	Nanomaterials and Nanotechnology, Nanophotonics and Plasmonics, Optoelectronic Devices, Renewable Energy, Power Systems
Dr. Hafiz Imtiaz	CSP	Privacy preserving machine learning, Learning from decentralized-data, optimization problems in federated settings
Dr. Hamidur Rahman	EP, EEPS	Hardware security, RISC-V Processor, Memristor based circuit design, Stability analysis of power system, Renewable energy
Dr. Shaikh Asif Mahmood	EP	2D Materials, X-ray photoconductor, Solar cells, Sensors
Y easir Arafat		
Dr. Md. Asiful Islam	CSP	Radar Imaging using Deep/Machine Learning, Ultrasound Imaging using Deep/Machine Learning, Electrical Capacitance Tomography
Dr. Muhammad Abdullah Arafat	EEPS, EP	Wireless Power Transfer, Bioelectronics, flexible and stretchable electronics
Dr. Sajid Muhaimin Choudhury	EEPS, EP	Quantum-, Photonic-, Antenna-, Computing-, Embedded- and Renewable Systems. (see sajid.buet.ac.bd/research for details).
Dr. Nadim Chowdhury	EP	AI-enabled semiconductor device design, Photonic Integrated Circuit Design, AI-enabled analog IC design, MMIC design in IHP 130 SiGe BiCMOS technology.

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Name of the faculty	Area of research (EEPS, EP, CSP)	Research keywords
Dr. Maruf Ahmed	CSP, EP	MRI/QSM reconstruction (CSP), ML/DL application for health monitoring (CSP), Sensor application and modeling (EP)
Dr. Ehsanur Rahman	EP	High Electron Mobility Transistor (HEMT), NanoBio Sensors, First Principle Study, Solar Cells, Thermophotonics, Thermo photovoltaics, Thermoelectrics, Fuel Cells and Hybrid Energy Conversion Devices To learn more Visit: https://sites.google.com/site/ehsanurbuet/research?authuser=0
Dr. Zabir Ahmed	EP	Integrated photonics, Nanobiophotonics, Photonic Biosensors, Implantable Photonic Devices. For additional details: https://sites.google.com/view/zabirahmed/bio
Dr. Orchi Hassan	EP	Spintronic Device Design and Modeling, AI/ML/ Neuromorphic Computing Hardware Design