

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

M.Sc/M.Engg Admission, April 2024

Notice for Applicants - 08 Area of Research and Research Keywords of Faculty Members

Date: September 08, 2024

| Sl. No. | Name of the faculty | Area of research (EEPS, EP, CSP) | Research keywords |
|------------|--|---|---|
| | Example | EEPS, EP | Power Electronics; Plasmonics; Optoelectronic Devices; Nanophotonic Biosensors |
| 1. | Dr. S. Shahnawaz Ahmed | | |
| 2. | Dr. Md. Saifur Rahman | EEPS, CSP, EP | Energy Conversion Systems, Battery Charging Stations, Energy Storage Devices, Smart Grid + Analog and Digital Communications, Digital Signal Processing, Engineering Electromagnetics + Electronics, |
| 3. | Dr. Pran Kanai Saha | | |
| 4. | Dr. Quazi Deen Mohd Khosru | EP | Nanoelectronic and Nanophotonic Devices and Materials, NanoBio Sensors |
| 5. | Dr. Md. Shafiqul Islam | EP | Nanoelectronic Devices and Materials, NanoBio Sensors, High- power Electronic Devices |
| 6. | Dr. Md. Kamrul Hasan | | |
| 7. | Dr. Md. Aynal Haque | | |
| 8. | Dr A. B. M. Harun-Ur- Rashid | EEPS | |
| 9. | Dr. Sharif Mohd. Mominuzzaman | EP, EEPS | EP: Nano device, Nano-materials, Nano Photonic Devices, Solar Energy Materials and Solar cells. EEPS: Renewable Energy Systems, Power Systems |
| 10. | Dr. Mohammad Jahangir Alam | EEPS, EP | Renewable Energy Systems, Electronics; |
| 11. | Dr. Md. Shah Alam | EP, CSP | Plasmonic devices, Metamaterials, Speciality fibers, Sensors, Waveguide devices |
| 12. | Dr. Md. Ziaur Rahman Khan | EEPS | Power Converters, Renewable Energy Systems, Electric Vehicle, VRE Challanges |
| 13. | Dr. Mohad. Imamul Hassan Bhuiyan | EEPS, EP, CSP | Transformer Fault detection; Photonics; biomedical signal and image processing; deep learning; Machine learning |
| 14. | Dr. Shaikh Anowarul Fattah | EEPS, CSP | Computer vision/robotics, biomedical, deep learning/machine learning, Grid-interactive energy management, fault/demand prediction <u>https://eee.buet.ac.bd/people/faculty/dsaf</u> <u>https://scholar.google.com/citations?user=qDG3vBUAAAAJ&hl=en</u> |

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| 15. | Dr. Md. Nasim A. Dewan | | |
| 16. | Dr. Muhammad Anisuzzaman Talukder | EEPS, EP | anis.buet.ac.bd |
| 17. | Dr. Celia Shahnaz | | Deep learning, biomedical, biometric security, Robotics, Smart grid, renewable energy <u>https://www.celiashahnaz.com/research-related-to-ieee-cs/,</u> <u>https://scholar.google.com/citations?user=gwrHyr8AAAAJ&hl=en</u> |
| 18. | Dr. Mohammad Ariful Haque | CSP | Deep learning, Intelligent systems |
| 19. | Dr. Abdul Hasib Chowdhury | EEPS | Power system operations and control, optimization, reliability |
| 20. | Dr. Farseem Mannan Mohammedy | EEPS, EP | Energy modeling, RE, photonic and optoelectronic sensors and devices. |
| 21. | Dr. Mohammad Faisal | EP, CSP | FSO communication, Ultra High Speed fiber-optic communication, SCG, Fiber Sensors, Photonic waveguide |
| 22. | Dr. Md. Forkan Uddin | CSP, EEPS | 6G Communications, Optical Communications, Deep Learning in Communication, Smart Grid Demand Response, Renewable Energy |
| 23. | Dr. Lutfa Akter | CSP | Radio over Fiber; Radar Signal Detection, Deep Learning, Machine Learning, Opportunistic Spectrum Usage Modeling |
| 24. | Dr. Md. Kawsar Alam | EP | Nanomaterials and Electronic Devices https://kawsaralam.buet.ac.bd/ |
| 25 | Dr. Md. Zahurul Islam | EEPS, EP | EEPS: Power System, Power Electronics, Any self-defined and self-motivated topics EP: Nanophotonics, Optics (materials, devices, systems, sensors etc.), Any self-defined and self-motivated topics URL: mdzahurulislam.buet.ac.bd |
| 26. | Dr. Apratim Roy | EP | Nanoelectronic Devices and Circuits, Biomedical Circuits, Renewable Systems |
| 27. | Dr. Mahbub Alam | EP | Nanomaterials, NanoFET, Quantum, Topological and 2D Materials, Quantum Transport, Electron Photon Interaction |
| 28. | Dr. Md. Zunaid Baten | - | - |
| 29. | Hamidur Rahman | EP, EEPS | Hardware Security, VLSI Testing, Effect of shape and materials on gate all around MOSFET, Stability of Bangladesh Power System, Harmonic Analysis due to EV charging |
| 30. | Dr. Shaikh Asif Mahmood | EP | Electronic Devices |
| 31. | Mr. Yeasir Arafat | | |
| 32. | Dr. Ahmed Zubair | EEPS, EP | Nanomaterials and Nanosystems, Plasmonics and Nanophotonics, Electronic and Photonic Device Fabrication and Characterization, Renewable Energy, Power systems |
| 33. | Dr. Md. Asiful Islam | CSP | Machine learning in Electromagnetics, Machine learning for ECG signals, Microwave and Diffuse Optical Imaging, Radar imaging for autonomous vehicles |
| 34. | Dr. Hafiz Imtiaz | EEPS, CSP | Machine learning, privacy, distributed optimization, neural networks, semi-supervised learning in power systems |
| 35. | Dr. Muhammad Abdullah Arafat | EP, EEPS | Wireless power transfer, biomedical electronics, electric vehicles |

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| 36. | Dr. Sajid Muhaimin Choudhury | EEPS, EP | Nanophotonics, Metasurface, Plasmonic Biosensing, Solar Photovoltaic Systems Design, Renewable Energy Dominated Grid Planning, (other research topics might be incorporated based on discussion with the supervisee), Please see my <u>Publications</u> or my <u>Google Scholar</u> profile in my website (<u>http://sajid.buet.ac.bd</u>). (2 RA positions are available for full-time MSc students under <u>RISE MetaLens Project</u>) |
| 37. | Dr. Nadim Chowdhury | EP | |
| 38. | Dr. Maruf Ahmed | EP, CSP | Biomedical (MRI, CT) Image Processing and Analysis, NIR photodetector |
| 39. | Dr. Ehsanur Rahman | EP | Next Generation Solar Cells, Photonics, High Electron Mobility Transistors (HEMT), Plasmonics, Novel Solid-State Hybrid Energy Conversion Devices Explore the following link for more details: <u>https://sites.google.com/site/ehsanurbuet/research</u> |
| 40. | Dr. Zabir Ahmed | EP | Nanobiophotonics, Bioesensing, 2D Materials, Integrated photonics, Neural intefaces |
| 41. | Dr. Orchi Hassan | EP | Nanoelectronic and Spintronic Devices and Circuits, Neuromorphic Computing Hardware |

Postgraduate (M.Sc./M. Engg.) Admission Committee

Department of EEE, BUET, Dhaka-1205.

Contact: eee-pg-admission-2024@buet.ac.bd







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