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

MSc./M. Engg. Admission, April 2023

Notice for Supervisor Selection

21 June 2023

The list of selected students with their research areas for M.Sc./M. Engg. program under the Dept. of EEE, BUET for the semester April 2023 has already been circulated.

Please follow the guidelines below for thesis supervisor selection. **You must select a supervisor according to your division (Area) allocated to you.** Please follow the Notice posted in the PG Admission website and Notice Board for research areas and relevant fields of EEE faculty members and number of students each faculty member is willing to supervise. You have to contact them according to the guideline below. Failure to submit the following form https://forms.gle/4ftkCYGfEGCNbRi44 will delay the admission process.

Convenor

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

Department of EEE, BUET, Dhaka-1000.

Guideline for MSc Students to find a Supervisor

(a) All students must submit necessary information in the following Google form within <u>June</u> <u>24, 2023 Saturday 4:59 pm.</u> The students need to fill the form *after* they communicate with EEE faculty members. Without consent or communication, the form will not be complete.

https://forms.gle/4ftkCYGfEGCNbRi4A

(b) The students are advised to contact his/her intended supervisor, preferably over email. Please follow the Notice posted in the PG Admission website and Notice Board for research areas and relevant fields of EEE faculty members and number of students each faculty member is willing to supervise.

The email MUST contain the <u>Application ID</u> and active phone number of the student. They may also briefly mention their undergraduate institution, CGPA and area of research.

It is strongly advised that a student does not send a generic email to multiple supervisors at the same time.

(c) Upon consent from the intended supervisor, the student must collect the supporting document in this regard. The supporting document can be a pdf file of the email received from the supervisor, where the supervisor clearly expresses his/her consent for being the student's Thesis Supervisor for the program. Or it can be in the form of an application, which must contain signature of the supervisor who has given his/her consent.

(d) After uploading the *Consent document (PDF file of the email or Application Signed by Supervisor)* in the google form above, **the student must inform the supervisor that he/she has submitted the mentioned file.**

(e) <u>The student's admission process will remain incomplete if the Google form is not submitted.</u>

M.Sc. Engg./ M. Engg. Program, April 2023 Semester

Department of EEE, BUET

Sl. no.	Name of the Faculty	AREA and No. of Desired Students to be	Keywords of Your Research (<u>Max. Five</u>)
		Supervised in each Research	
		Area	
1	Dr. Md. Saifur Rahman	EEPS(2)	Renewable Energy, Smart Grid, HVDC Transmission
		CSP(5)	Modern Aether Theory, Quantum Computing, Innovative Electronic Circuits. Digital, Quantum and Wireless Communications, Applications of AI and IoT
2	Dr. Pran Kanai Saha	EP (1) CSP(1)	
3	Dr. Quazi Deen Mohd Khosru	EP(4)	Nanophotonics and Nanoelectronic Materials and Devices
4	Dr. Md. Shafiqul Islam	EP(3) EEPS(1)	Nanomaterials, Nanoelectronic devices, PV
5	Dr. Md. Kamrul Hasan	CSP(4)	Medical Imaging, Speech and Image Processing, Biomedical Signal (e.g., EEG, ECG, PPG) Processing, Medical Image Segmentation and Classification, Robotics, Deep Learning, Biometrics, Intelligent Transportation System, Biosensors, Electric Vehicle (EV), Wireless EV Charger
6	Dr. Md. Aynal Haque	CSP(3)	Biomedical image processing, signal processing, disease detection and classification
7	Dr A. B. M. Harun-Ur-Rashid	EP(4)	EP: Hardware Security, Neuromorphic Computation, High Speed Interconnect with Surface wave/SPP, RF Circuit CSP: Hardware implementation of SP algorithm in SoC with custom processor EEPS: Si/GaN/SiC converter for EV or other application.
8	Dr. Sharif Mohd. Mominuzzaman	EP(4) EEPS(4)	EP: Nano/Opto Electronics Materials, Devices (Nanowires/rods, Quantum Dots, Carbon Nanotube, Fullerene, Graphene, III- V materials and Devices, Photovoltaic Cells) EEPS: PV/ Hybrid Systems, Nanodevices for Power Electronics Applications

Sl.	Name of the Faculty	AREA and No.	Keywords of Your Research
no.		of Desired	(<u>Max. Five</u>)
		Students to be	
		Supervised in	
		each Research	
		Area	
9	Dr. Mohammad Jahangir	EP(2)	
	Alam	EEPS(2)	
10	Dr. Md. Ziaur Rahman Khan	EEPS(8)	
11	Dr. Mohad. Imamul Hassan	CSP(5)	SPR-based PCF sensors, Aging and health
	Bhuiyan	EEPS(1)	analysis of transformers, power system fault
		EP(1)	analysis, Renewable energy, electric vehicle,
			biomedical image segmentation, SAR image
			segmentation, sleep staging and analysis
			Depression analysis etc.
12	Dr. Shaikh Anowarul Fattah	CSP(7)	Machine/Deep Learning Medical Image
12	DI. Shaikii Anowarui Fattan	FFPS(2)	analysis Computer Vision Speech/Audio-
			Visual Processing, Biomedical Engg.
			Robotics and AI, Natural language
			processing, Biometrics, Bioinformatics
			Smart grid, Load forecasting, fault detection,
			harmonic power grid analysis, PV power
			prediction, electric vehicle, renewable energy
			forecasting
13	Dr. Md. Nasim A. Dewan	EP(2)	RF Plasma Modeling
14	Dr. S. M. Mahbubur Rahman	CSP(4)	Computer vision, intelligent transportation
		EEPS(2)	system, artificial intelligence
15	Dr. Muhammad Anisuzzaman	EP(6)	Nanophotonics, plasmonic lasers, plasmonic
	Talukder	EEPS(3)	nanobiosensors, solar H2 generation, electric
16	Dr. Calla Cl. 1		venicle, supercapacitors
16	Dr. Celia Shahnaz	CSP(6)	Control system and robotics
		EEPS(2)	Audio visual recognition for biometric
			Addio-visual recognition for biometric
			Multimodal emotion recognition
			Pattern recognition, machine learning and
			deep learning for audio. video. biomedical
			and power signals,
			AI for clean energy (solar and other
			renewables)
17	Dr. Mohammad Ariful Haque	CSP(4)	Deep learning, Robotics and automation,
			Spoken language processing, Digital speech
L			processing, Low resource machines learning
18	Dr. Abdul Hasib Chowdhury	EEPS(3)	
19	Dr. Farseem Mannan	EP(2)	Energy Modeling, clean transition
	Mohammedy	EEPS(3)	mechanism, Photonic devices.

Sl. no.	Name of the Faculty	AREA and No. of Desired	Keywords of Your Research (Max. Five)
		Students to be Supervised in each Research Area	
20	Dr. Samia Subrina	EP(2)	Nanomaterials, Nanoelectronic devices, Quantum transport, PV
21	Dr. Md. Forkan Uddin	CSP(2) EEPS(3)	6G wireless systems, WLAN, Smart Grid, Renewable Energy, Wireless Charging
22	Dr. Lutfa Akter	CSP(3)	HAPS, IRS, NOMA, Deep Learning, 5G, 6G
23	Dr. Md. Kawsar Alam	EP(4)	Nano and optoelectronic Device/Material Science/ Modeling/ Design/Analysis
24	Dr. Md. Zahurul Islam	EEPS(2) EP(3)	Nanophotonics, Plasmonics, Biosensors, Plasmonic solar cells
25	Dr. Apratim Roy	EP(4)	Micro and nanoelectronics, Radio frequency architectures
26	Mr. Hamidur Rahman	EP(7) EEPS(2)	Hardware Security
27	Dr. Shaikh Asif Mahmood	EP(4)	X-ray detector and solar cell modeling/analysis
28	Mr. Yeasir Arafat	EP(1) EEPS(6)	Power Electronics for RE, B2B HVDC, Net Metering, Smart Grid, Energy Modeling
29	Dr. Mahbub Alam	EP(7)	Nanoelectronic devices, Ballistic and topological FET, 2D materials/Topological materials/Twisted bilayer graphene nanoribbon and related electronic devices, slow electron/Dirac Fermion/ Majorana Fermion and related electronic devices
30	Dr. Md. Zunaid Baten	EP(4)	Solid-state electronics and photonics
31	Dr. Ahmed Zubair	EP(7) EEPS(2)	Nanomaterials, Photonics, Nanodevice/nanostructure fabrication and characterization, Solar cells, Hybrid renewable energy systems
32	Dr. Hafiz Imtiaz	CSP(9)	Machine learning, privacy, neural networks, speaker identification, distributed machine learning, optimization
33	Dr. Muhammad Abdullah Arafat	EP(2) EEPS(2)	Biosensors, EV, Wireless Power Transfer, Renewable Energy Systems

Sl. no.	Name of the Faculty	AREA and No. of Desired Students to be Supervised in each Research Area	Keywords of Your Research (<u>Max. Five</u>)
34	Dr. Sajid Muhaimin Choudhury	EP(7) CSP(2)	Quantum Computing Plasmonic Biosensing Plasmonic Modulation Photonic Neuromorphic Computing Microprocessor Design Optimization Embedded Systems Design for Environmental Applications Deep Learning Based classification of scientific journals
35	Dr. Nadim Chowdhury	EP(9)	MMIC design using CREE/GF/Qorvo pdk for GaN transistor Compact model for GaN transistor in verilog-A (IC-CAP) GaN based power converter GaN based Microled DC-DC Converter design for envelope tracking circuit for 5G and beyond.
36	Dr. Ehsanur Rahman	EP(5)	Near field Thermophotovoltaics, Photon Enhanced Thermionic Solar Cell, Dielectric Modulated FET based Biosensor
37	Dr. Orchi Hassan	EP(5)	Nanoelectronic and Spintronic Device Modeling/Design, Neuromorphic Computing, Mixed-Signal Circuit Design