BANGLADESH UNIVERSITY OF ENGINEERING AND TECHNOLOGY, DHAKA – 1000

DEPARTMENT OF ELECTRICAL AND ELECRONIC ENGINEERING

SERVING THE COUNTRY WITH INNOVATION AND QUALITY IN TESTING & CONSULTANCY

RESOURCE PERSONNEL

BRTC-EEE

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RESOURCE PERSONNEL

PHOTO	FACULTY	QUALIFICATION	FIELD OF EXPERTISE
	Dr. S. Shahnawaz Ahmed Professor	PhD(UK), MSc Engg. (BUET), BSc Engg. (BUET)	Planning, design, operation and control of power and energy systems, smart grid, nuclear power plants, power system SCADA and protection, grid impact studies of nonlinear loads and renewable generation sources
	Dr. Md. Saifur Rahman Professor	PhD (UK), MSc Engg. (BUET), BSc Engg. (BUET)	Digital Communication and Signal Processing: PABX, Steno Telephone Sets, MODEM, Serial and Parallel Communications, Protocols, SS7 Applications, IP Telephony, IP-Phones, IP-PBX, Soft-Switch, Power Line Carrier Communication (PLCC), Wireless and Cellular Mobile Communications, Radar and Satellite Communications, Quantum Communication, Speech- and Image Processing Applications. Electromagnetics: Transformers, Induction Motors, Low RPM Permanent Magnet Generators, Brushless DC Motors. Automation: Digital Scales, PC-Based Automatic Food-Grain Measuring System for a Hopper Scale, Speech and/or Image Password Driven Security Systems. Neural Network and Fuzzy Logic in Control Applications. Power and Renewable Energy Systems: Circuit-

			Breakers, Switchgears, PC-Based Power System Protection, Hybrid Power Systems, Smart Grid, Smart Metering, DC and AC CFL lamps, PV Panels, Charge Controllers, Grid-Tie Inverters, Batteries, Battery Management System (BMS), Solar Pump Controllers for Irrigation Purposes, Modern Aether Theory and Non-Traditional Renewable Energy Systems. Hardware and Software Development: A/D and D/A Converter Applications, Data Acquisition Techniques, Computer Networking, Low-cost LAN, Generation of Pseudo-Random Numbers with Uniform Distribution for Conducting Lottery, PC-based Educational Software, Barcode Readers, Online Voting System using Cellular Mobile Communication.
	Dr. Pran Kanai Saha Professor	PhD (DCU, Ireland), M. Engg. (IIT Roorkee, India), BSc Engg. (BUET)	UWB system, EMI and EMC, Antenna and Propagation, Satellite communication (Space and Ground station), RF Circuit Design, Control and Automation, Electrical Design, Testing of Electrical machines, Transformer, Cables, Circuit breakers, LED Street Light system and Solar Panel, SCADA, Lottery Software, EM radiation measurement.
	Dr. Quazi Deen Mohd Khosru Professor	PhD (Osaka University, Japan) MSc Engg (BUET) BSc Engg (AMU, Aligarh, India)	Research: Nanotechnology. Nanoelectronic and Nanophotonic Materials and Devices. Fabrication, Characterization and Modeling of Semiconductor Devices. Dielectric Reliability. Solar Energy. Testing: Renewable energy Systems - PV Module, Solar system, Solar street light system, Charge Controllers, Batteries. Low/Medium/High voltage power systems - Cables, Circuit Breakers, Transformers. Sub-station components/ Equipment: ACB, ATS, PFI Plant, LT/HT Panels, Motor, Generator.

	Dr. Md. Shafiqul Islam Professor	PhD (Republic of Ireland), MSc Engg. (BUET), BSc Engg. (BUET)	Semiconductor Fabrication and Processing; Low Power Electronics; Renewable energy; Testing of Solar PV, Charge Controllers, Inverters, Generators, Transformers, Switchgears, Overhead power conductors, Cables, LED Lights and Fans.
	Dr. Md. Kamrul Hasan Professor	PhD (Japan), MSc Engg. (BUET), M. Engg. (Japan), BSc Engg. (BUET)	Medical Imaging, AI in Medicine, Intelligent/Smart Systems Design, Electric Vehicles, IoT, Health Services Design, Solar PV Systems, Wearable Technologies, Access Control Systems, Electrical System Design, Fire Detection and Safety, Electrical Equipment/Product Testing.
	Dr. Md. Aynal Haque Professor	PhD (Japan), MSc Engg. (BUET), BSc Engg. (BUET)	Biomedical signal and image processing, Electrical system design, Fire detection and Safety, Access control systems
	Dr ABM Harun-ur Rashid Professor	PhD (Japan) MSc Engg. (Japan), BSc Engg. (BUET)	Analog and Digital Integrated Circuit Design, Semiconductor Fabrication and Processing, SPICE Modeling, Low Power Electronics, Photovoltaic Compoents and System Design and Testing, Power Plant Simulator Design.
	Dr. Sharif Mohammad Mominuzzaman Professor	BSc (BUET), MSc (BUET), MSc (Japan), PhD (Japan), Post Doc (Japan)	Light and light-based technologies (Emitter and Detectors/Sensors): Light (Bulb, Fluorescent tube, CFL, LED), Giant Display Panels, LASER, Detectors. Renewable energy Systems: PV Module, Solar home system, Solar mini and microgrid, Solar street light system, pico SOLAR, Charge Controllers, Battery, Hybrid solar- electro-mechanical systems; Solar power plant. Vehicles: Electric Car, Hybrid vehicles. Low/Medium/High voltage power systems: Cable, Transformer. Sub-station components/ Equipment: Circuit Breakers, ATS, PFI Plant, LT/HT Switchgear testing. Electrical

			Safety: Fire, EMI, UV. Opto-Nano technology.
	Dr. Mohammad Jahangir Alam Professor	**PhD (Ireland), MSc Engg. (BUET), BSc Engg. (BUET)**	Electrical Design and Safety, Fire Detection and safety, Renewable Energy, Solar PV, Charge Controllers, Inverters, Cable and Tranformer Testing, Power Electronics, Semiconductoe Devices and Characterization.
	Dr. Md. Shah Alam Professor	**Ph.D. (Japan), M. Engg. (Japan), BSc Engg. (RUET)**	Guided wave photonic devices; Optical fibers and photonic crystal fibers; Surface plasmons and metamaterials; Bio-sensors; Electrical system design and testing, Building/House wiring; Electric lighting; Electrical safety; Solar system design and PV components testing; Electromagnetic hazards; Testing low and high voltage electrical devices/equipments, cables, transformers; Surveilance systems; Telecommunications
	Dr. Md. Ziaur Rahman Khan Professor	Ph.D. (Cambridge, UK), M. Engg. (BUET), BSc Engg. (BUET)	Renewable Energy Technologies ; Solar PV System Design, Inspection, Commissioning and Impact Analysis, Energy Efficiency, Lighting Design and Testing; Lightning System Design, Electrical Service Design Electrical safety; Testing low and high voltage electrical devices/equipments, power converters; Surveilance systems; Electric Vehicles, Storage systems.
	Dr. Mohammed Imamul Hassan Bhuiyan Professor	B.Sc. (BUET), M.Sc. (BUET), PhD (Canada)	Machine learning, signal, image and video processing, biomedical signal and image processing, genomic signal processing, power system-quality and fault analysis, Electrical System Design and Safety, Fire Detection and Alarm Systems, Fire Investigations, renewable energy, solar PV system, power and telecommunication cable, transformer and batteries, electric light, access control and CCTV

			systems, building management system, SCADA, SAR, optical fibers and systems, Satellite and RADAR Communication
	Dr. Shaikh Anowarul Fattah Professor	B.Sc. (BUET), M.Sc. (BUET), PhD (Canada), Postdoc (USA)	AI and machine/deep learning; Signal processing; Biomedical engineering; Robotics; Process automation; PLC; Drone; Underwater robotics; Rescue robots; Service robots; BCI; Cell phone manufacturing; Portable medical devices; Wearables; Telemedicine; Health informatics; Computer-aided diagnosis; Digital forensic; Digital Security; CCTV; Data analytics; Biometric; NLP; Noise cancellation; Voice recognition; Bangla speech/text; Braille; Vehicle detection and traffic; Multimedia communication, Telecommunication; Satellite communication; Electrical system design, wiring, safety; Access control; Smart building management; Fire detection/alarm; Sustainable development; Renewable energy; Reactor control; SCADA; Power plant simulator; Cable; Meters; Panel; Transformer; Motors; Batteries; Electric light;
	Dr. Md. Nasim Ahmed Dewan Professor	B.Sc. (BUET), M.Sc. (BUET), PhD (Ireland)	RF Plasma modelling, Lottery Software Design, Cable and Transformer Testing, Electrical Equipment Testing
	Dr. S. M. Mahbubur Rahman Professor	BSc (BUET), MSc (BUET), PhD(Canada), Postdoc(Canada)	Feasibility analysis of a project, Expert system design, Technical audit, Design of fire protection system, Standard testing of electrical equipment, Electrical safety, High voltage equipment testing, AI or Computer vision-based system design

	Dr. Muhammad Anisuzzaman Talukder Professor	BSc (BUET), MSc (BUET), PhD (USA), Postdoc (UK)	Light and light-based technologies; Renewable energy; Solar cells: Solar home system, solar street light system; Hydrogen generation; supercapacitor; Optical fiber; Electric vehicles; Solar power plant; Lasers and other photonic devices; Sensors, remote sensing, CO_2 sensing, multi-sensing, biosensors
	Dr. Celia Shahnaz Professor	BSc (BUET), MSc (BUET), PhD(Canada).	Signal processing for speech analysis and speech enhancement, audio-visual recognition for biometric security, multimodal emotion recognition, control system, robotics, pattern recognition, machine learning and deep learning for audio, video, biomedical, power signals, and humanitarian technology. Feasibility analysis of a project, Technical Specifications and expert system design, Bid/Proposal Evaluation and negotiation, Portable and wearable medical devices, Telemedicine, Renewal energy, SCADA, Electrical system design, wiring, safety; Access control; Smart building management; Fire detection/alarm system, meter calibration, Testing of Solar street light system (panel, battery, LED), Charge Controllers, Light/Fan/Switch, Batteries, circuit breakers , busbars, Power (including Fire Resistant/Retardant) Cable and Transformer.
	Dr. Mohammad Ariful Haque Professor	PhD (BUET), MSc Engg. (BUET), BSc Engg. (BUET)	Deep learning and artifical intelligence, digital signal processing, speech and natural language processing, control systems

	Dr. Abdul Hasib Chowdhury Professor	PhD (BUET), MSc Engg. (BUET), BSc Engg. (BUET)	Power and energy systems planning and optimization, operation and control, reliability and enhancements, stability and security; grid impact studies; renewable energy systems; EV, energy storage; future grids; power system protection; power quality; high voltage systems; power and energy policy, acts, rules, regulations
	Dr. Farseem Mannan Mohammedy Professor	B.Sc. (BUET), M.Sc. (BUET), PhD (Canada)	Semiconductor Fabrication and Processing, Thin film thechologies, MBE, Energy modeling and policy discussions, RE, Nuclear Power. Fire safety. Testing expertise: Solar street light system testing (panel, battery, LED), tender vetting, bidding evaluation, cable and transformer testing, fan testing, BBT inspection etc.
	Dr. Mohammad Faisal Professor	PhD (Japan), MSc Engg. (BUET), BSc Engg. (BUET)	Telecommunication, Fiber-optic transmission systems, Fiber Nonlinearities, Optical Networks, FSO, Cellular Mobile Technology, Optoelectronics, Optical and THz waveguide and sensors, Biosensors, PCF, SCADA, Electrical Design, Power Cable and Telecom Cable, Transformer, Light, RE
	Dr. Samia Subrina Professor	**PhD (USA), MSc Engg. (BUET), BSc Engg. (BUET)**	Modeling of nanomaterials and nanoscale devices; Modeling of optoelectronic devices; Semiconductor device and material characterization; Renewable energy; Electrical Safety, Fire Detection and Alarm Systems; Grid Impact Analysis of Generation, Power Plant Simulator Design, Testing of Solar street light system (panel, battery, LED), Charge Controllers, Light/Fan/Switch, Batteries, Power (including Fire Resistant/Retardant) Cable and Transformer.

	Dr. Md. Forkan Uddin Professor	PhD (Canada), MSc Engg. (BUET), BSc Engg. (BUET)	Wireless communications and networks including WPAN, WiFi, 4G, 5G and 6G; Optical communication and networks; Network cyber security; Satellite communication, aerial communication and navigation; IoT, AI and 4IR; Intelligent smart cities including street lighting, traffic controlling, and transportation systems; Smart grid including communication system, energy disaggregation, electric vehicle charging and scheduling, and electric load scheduling and control; Smart access control and surveillance system; Smart office, building, hospital and industry management and control including energy management.
	Dr. Md. Farhad Hossain Professor	PhD (Australia), MSc Engg. (BUET), BSc Engg. (BUET)	Feasibility study of Large Telecommunication Projects; Wireless Networks (Mobile Cellular Networks - 2G/3G/4G/5G/beyond, WiFi, Zigbee, Bluetooth, RFID, LoRaWAN, Underwater Sensor Networks, Remote Sensing); 4IR Technologies, IoT, AI, Industry Automation, Smart Energy/Cities/Building/Agriculture; Bangladesh Telecommunication Networks, Optical Fiber Backbone and Internet; Satellite Communication Systems, Ground Station, Radar, VHF System, Satellite TV; Optical Transmission Network, Optical DWDM Network, GPON; Power Grid Automation/Smart Grid Communication; Access Control, Tracking, Surveillance System - CCTV, PABX, Audio-Visual System; Electrical Service Design, Installation and Commissioning; Testing of Transformers, Cables, Circuit Breakers and LED Lights.

	Name	Qualification	Research Interest
	Dr. Lutfa Akter Professor	PhD (USA), MSc Engg. (BUET), BSc Engg. (BUET)	Telecommunication Signals and Systems, Feasibility Study of Deploying New TelecommunicationTechnolgy, Planning and Optimization of Telecommunication Networks, Cyber Security, Integrated Terrestrial and Aerial Communication System, 4IR, IoT System Design, Smart Grid Communication, Intelligent Street Light Controlling System, Antenna Design, Electrical Design
	Dr. Md. Kawsar Alam Professor	B.Sc. (BUET), M.Sc. (BUET), PhD (Canada)	Electrical Design and Safety, SCADA, Nano Devices, Solar Energy
	Dr. Md. Shamim Reza Professor	B.Sc. (BUET), M.Sc. (BUET), PhD (UNSW, Australia)	Power quality analysis, high voltage equipment, grid-connected renewable energy, power electronics
	Dr. Nahid-Al-Masood Professor	PhD (The University of Queensland, Australia), MSc Engg. (BUET), BSc Engg. (BUET)	Power and energy systems operation and control, planning and reliability, power system security, future low inertia grids, power quality, grid impact analysis, grid integration of wind and PV, energy storage, machine learning applications in power systems, power system optimization, power system protection, high voltage equipment, energy policy and regulations.
	Hamidur Rahman Associate Professor	M. Engg. (USA), MSc Engg. (BUET), BSc Engg. (BUET)	Hardware Security, Testing VLSI Circuit, Modeling of Graphene based Nano Devices, Grid Impact Analysis of Generation, Line and Load, Renewable Energy, Electrical Safety, Fire Detection and Alarm Systems, Power Plant Simulator Design, Solar PV Panels, Charge Controllers, Inverters, Batteries, Power

			(including Fire Resistant/Retardant) Cable and Transformer Testing.
	Dr. Shaikh Asif Mahmood Associate Professor	B.Sc. (BUET), M.Sc. (BUET), PhD (Canada)	Modeling of X-ray detectors, Solar Cells, MOSFETs; Electrical Safety, Fire Detection and Alarm Systems; Grid Impact Analysis of Generation, Testing of Solar street light system (panel, battery, LED, Charge Controllers), Light, Fan, Switch, Power Cable, Circuit breakers and Transformer.
	Yeasir Arafat Associate Professor	MSc Engg. (BUET), BSc Engg. (BUET)	Electrical Service Design: Internal Electrical Works, Illumination Design, Data and Tele-nets, Sub-station, Technical Audit and Inspection for Electrical Safety, Design for Protection against Lightning and Thunder, Fire Detection and Alarm System, Fire Investigations, Suppression of EMI, UV, Digital Security (Access Control System, CCTV and Surveillance Systems). Expertise on BNBC and relevant Acts/Rules/Regulations. Energy and Power: Design of Solar PV technologies (Home System, mini/microgrid, street light system), Installation and Commissioning, Hybrid Systems. Power Plant Simulator, Impact Studies, SCADA, Power Quality and Fault Analysis. Harmonics Analysis, Contingency Analysis, HVDC. Smart Systems: Home/Village/City/Industry/Power Grid/Electric Vehicle Scheduling for Load Management. Building Management System. Public Procurement: Project Feasibility Studies, Technical Specifications, DPP Preparation, Compliance (Technical & Legal) Issues, Bid/Proposal Evaluation, Negotiation, and Arbitration. Testing: High Voltage testing of power transformers, HV devices/equipment test, Sub-station

			Equipment (HT/LT Control Panels, CBs, Relays, Switchgears, PFI, ATS), Motors, Generators, Cables, Overhead Power Conductors, BBTs, Fans, Gas Filled (Bulb, FL, CFL, Sodium) and Electronic Lamps (LEDs), PV Panels, Charge Controllers, Batteries, Power Converters (Inverter etc).
	Dr. Apratim Roy Associate Professor	BSc Engg. (BUET), MSc Engg. (BUET), PhD (BUET)	Electrical Design and Safety, Testing of Transformers, Cables, Solar PV, Charge Controllers, Inverters, Batteries, Generators, LED Lights, Street Lights, Fans, Switches, Sockets, Integrated Circuit Design,Mixed-signal Circuits, Power System Reliability, Renewable Technologies, Biomedical Circuits, Fire Detection and Safety, Renewable Energy
	Dr. Mahbub Alam Associate Professor	PhD (GaTech Lorraine, France), MSc Engg. (BUET), BSc Engg. (BUET)	Electrical design of installations, Testing of cables, transformes, LED, circuit breakers, switch and socket. Nanoelectronic devices.
	Dr. Md Zunaid Baten Associate Professor	PhD (U of Michigan, USA), MSc Engg. (BUET), BSc Engg. (BUET)	Solid-state electronics and Photonics; Optoelectronics; Nanotechnology; PV devices and systems; Solid-state lighting; Electronic circuits design and testing
	Dr. Ahmed Zubair Associate Professor	PhD (USA), MSc Engg (BUET), BSc Engg (BUET)	Nanotechnology; Wearable Optoelectronics; Terahertz Technology; Electronic and Photonic Device Fabrication and Characterization; Renewable Energy; Ultrafast Optical Phenomena, Power System SCADA, Grid Impact Studies of Nonlinear Loads and Renewable Generation Sources, Electrical System Design and Safety, Fire Detection and Alarm Systems, Testing of PV panel, batteries, charge controllers,

			inverters, street lights, cables, transformes, LED and circuit breakers
	Dr. Hafiz Imtiaz Assistant Professor	PhD (Rutgers University, USA), MSc Engg (BUET), BSc Engg (BUET)	Machine learning, signal and image processing, privacy-preserving computation, empirical risk minimization and optimization on decentralized data; feasibility study of cyber security network projects; 4IR Technologies, IoT, AI; electrical system design and safety, fire detection and alarm systems; meter calibration; testing of PV panels, batteries, charge controllers, inverters, street lights, copper/aluminuium cables, transformes, LED tubes, circuit breakers, automatic transfer switches (ATS), busbars, and optical fiber cables.
	Dr. Muhammad Abdullah Arafat Assistant Professor	PhD (Purdue U, USA), MSc Engg. (BUET), BSc Engg. (BUET)	Electrical and Electronic Circuit Design and Safety, Building Wiring, Bioelectronics and Devices, electrical system design and safety, Testing of Transformer, Cables, Street Lights, Fans, Charge Controllers, PV Panels, Batteries, Solar Pump Controllers, Inverters, LED Lights, FCBC, Circuit Breakers.
	Dr. Sajid Muhaimin Choudhury Assistant Professor	PhD (Purdue U, USA), MSc Engg. (BUET), BSc Engg. (BUET)	Embedded Systems, Internet of Things, Electrical Safety, Nanophotonics,
	Dr. Orchi Hassan Assistant Professor	PhD (Purdue U, USA), MSc Engg. (BUET), BSc Engg. (BUET)	Electrical Design, Safety, and Security, Electronic Circuit Design and Testing, Internet of Things. Nanoelectronic and Spintronic Device modeling, Neuromorphic Computing.