

FACILITIES

1. High Voltage Lab, Lab-in-Charge: Dr. Md. Ziaur Rahman Khan	
List of Facilities/Equipment in the Lab for BRTC Testing	List of BRTC Tests which can be conducted in the Lab
1. High voltage Transformer 1 Phase 100KVA	1. Substation test
2. High voltage Transformer 1 Phase 300KVA	2. Cable test
3. Oil Tester	3. Generator test
4. 3 Phase voltage up Transformer 415V	4. Lighting Arrester test
5. Impulse Generators 75kv	5. Current transformer test
6. Impulse Generators 275kv	6. Potential transformer test
7. Current Injector	7. Insulator test
8. Current Transformer	8. Pole and fitting test
9. Potential Transformer	9. Copper test
10. Digital Multimeter	10. Motor test
11. Digital Capacitor Meter	11. Test of 0.1, 0.2, 0.4, 0.6, 1.0, 1.2, 6.6, 11, 33kVA Transformer
12. 3 Phase voltage variac 75kw	12. Test of 0.1, 0.2, 0.4, 0.6, 1.0, 1.2, 6.6, 11, 33kV Cable
13. 3 Phase voltage variac 15A	
14. 1 Phase voltage variac 25A	
15. Oven	
16. Digital Miliohm Meter	
17. Precision Scale and DC Power Supply	

2. Circuit Lab (New), Lab-in-Charge: Dr. Mohammad Jahangir Alam	
List of Facilities/Equipment in the Lab for BRTC Testing	List of BRTC Tests which can be conducted in the Lab
1. Clip on meter	1. Fan
2. Tachometer	3. Energy meter
4. Anemometer	
5. Wattmeter	
6. Power factor meter	
7. Ammeter	

3. Electronic Circuit Simulation Lab, Lab-in-Charge: Prof. Dr. Samia Subrina	
List of Facilities/Equipment in the Lab for BRTC Testing	List of BRTC Tests which can be conducted in the Lab
1. Computers (19 pcs)	1. Design, Modeling and Simulation of Electrical and Electronic circuits (work which would need computers).

4. Control Systems Laboratory, Lab-in-Charge: Dr. Mohammad Ariful Haque	
List of Facilities/Equipment in the Lab for BRTC Testing	List of BRTC Tests which can be conducted in the Lab
1. Programmable Logic Controller (Siemens)	1. Any tests that require automation
2. Personal computers	2.

5. Huawei-BUET ICT Academy, Lab-in-Charge: Dr. Md. Farhad Hossain	
List of Facilities/Equipment in the Lab for BRTC Testing	List of BRTC Tests which can be conducted in the Lab
1. 5G Base Station with Active Antenna Unit (AAU), Baseband Unit (BBU) and battery sub-system.	1. QoS analysis of mobile cellular networks.
2. An IP network consisting of mainframe, routers, switches, clients, and servers.	2. IP Network solutions.
3. A room of capacity thirty for arranging training session, workshop and seminar.	3. Feasibility study, design vetting and top supervision of projects of telecommunication networks including mobile cellular networks, optical fiber networks and IP networks.
4.	4. Hands-on training on 5G and IP networks.
5.	5. EM radiation measurement and monitoring.

6. Power System Lab, Lab-in-Charge: Dr. Nahid-Al-Masood	
List of Facilities/Equipment in the Lab for BRTC Testing / Consultancy	List of BRTC Tests/ Consultancy which can be conducted in the Lab
1. Cyme PSAF Software	1. Decision support tool for power system experts to conduct steady state and dynamic impact studies considering arcing loads, motor drives, photovoltaic and other variable energy resources in a large-scale grid.

7. Optoelectronics Laboratory, Lab-in-Charge: Dr. Md Zunaid Baten	
List of Facilities/Equipment in the Lab for BRTC Testing	List of BRTC Tests which can be conducted in the Lab
1. PM100D optical power meter	*1. Measurement of optical output power
2. Spectrometer Red Tide USB-650-VIS-NIR with optical fiber	*2. Measurement of light spectral characteristics
	*Note: The tests mentioned above can be performed with better accuracy using the integrating sphere located in the Photovoltaic Components and System Testing laboratory

8. Photovoltaic Components and System Testing Lab, Lab-in-Charge: Dr. ABM Harun-ur Rashid	
List of Facilities/Equipment in the Lab for BRTC Testing	List of BRTC Tests which can be conducted in the Lab
1. Solar Simulator	1. Solar Panel Flash Testing (Open circuit voltage and current, Maximum output power, efficiency, MPPT functionality,
2. Integrating Sphere	2. LED/CFL Performance Test (Input Voltage, Current, Power, Lumen, Efficacy, CCT, CRI, THD
3. Battery Tester	3. Battery Capacity Testing
4. Oscilloscope	4. Equipment test
5. Signal Generator	5. Equipment test

9. VLSI Lab, Lab-in-Charge: Dr. ABM Harun-ur Rashid	
List of Facilities/Equipment in the Lab for BRTC Testing	List of BRTC Tests which can be conducted in the Lab
1. Cadence EDA tool	1. Integrated Circuit Design, verification and Physical design
2. High Performance Server with Xeon processor	2. MOS model parameter extraction
3. PC (No 20)	3. Electronic Circuit Simulation
4. FPGA Board	

10. Internet of Things (IoT) Research and Innovation Lab, Lab-in-Charge: Dr. Md. Farhad Hossain	
List of Facilities/Equipment in the Lab for BRTC Testing	List of BRTC Tests which can be conducted in the Lab
1. Signal Analyzer	1. IoT products testing and certifications
2. RF Signal Generator	2. IoT system design, design vetting and top supervision of IoT projects
3. 3D Printer	3. Data cable tests: Propagation Delay, Insertion Loss (Attenuation), RL, CMRL, NEXT, FEXT, ELFEXT, ELFEXT, Power Sum NEXT, Power Sum ACR-N, etc.
4. HF Digital Oscilloscope	4. RF Interference analysis
5. IoT Development Boards, microcontrollers	5. Electric vehicles
6. IoT Trainer Boards	6. 4IR projects formulation, design vetting and top supervision
7. Numerous IoT sensors for wide range of applications	7. PCB printing

8. Data cable, coaxial cable and optical fiber cable test meters	8. Consultancy services for 4IR, IoT and automation projects
9. Advanced Digital Multimeters	
10. LoRa and Zigbee Gateway and RF Modules	
11. Dedicated server with powerful GPU	
12. PCB Board Builder	
13. PCB Board Tester	
14. Radio communication Tester	
15. Programmable DC Power Supply	
16. High Performance computers	