



# DR. BIPUL KUMAR TALUKDAR

Assistant Professor | Department of Electrical Engineering | Jorhat Engineering College, Assam, India  
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## SUMMARY

A passionate and inspirational teacher with 10+ years of teaching-learning and research experience specializing in Electrical Engineering. Expert in course delivery, developing engaging lectures for pupils, and establishing strong relationships with students through academic mentorship, increasing class engagement and course enjoyment.

## EXPERIENCE

### [1] JORHAT ENGINEERING COLLEGE

Jorhat, Assam, India

Assistant Professor

01/08/2024 to Present

- Joined as an Assistant Professor in the Department of Electrical Engineering of Jorhat Engineering College, Assam on 1st August, 2024; appointed by *Govt. of Assam* through *Assam Public Service Commission* (APSC).
- Nurtured students' social, emotional and academic development by providing in-class support.

### [2] GIRIJANANDA CHOWDHURY UNIVERSITY

Guwahati, Assam, India

Assistant Professor

01/08/2014 to 31/07/2024

- Worked as an Assistant Professor for 10 years in the Department of Electrical Engineering of *Girijananda Chowdhury Institute of Management & Technology (GIMT)*, which has been affiliated to *Assam Science & Technology University (ASTU)*. The Institute is now upgraded to *Girijananda Chowdhury University* under the Assam Private University Act, 2007, Govt. of Assam. (GCU Act No. XLVII, 2022)
- In addition to the academic duties, I was holding the role of (a) AICTE Coordinator, (b) Training & Placement Coordinator (c) NBA Coordinator, (d) NAAC Coordinator (e) UHV Local Program Coordinator, (f) Member of IIC and (g) Coordinator/Member of various clubs related to co/extra-curricular activities
- Organized a number of National Level Workshops and FDPs sponsored by AICTE

## EDUCATION

**PH. D. (ELECTRICAL ENGINEERING): POWER SYSTEM RELIABILITY ANALYSIS WITH SPECIAL EMPHASIS ON RENEWABLE DISTRIBUTED GENERATION AND ELECTRIC VEHICLE** 2022  
Gauhati University, Assam

**MASTER'S DEGREE (M.E) WITH HONORS: ELECTRICAL ENGINEERING (POWER SYSTEM)** 2014  
Assam Engineering College, Jalukbari, Assam

**DEGREE (B.E): ELECTRICAL ENGINEERING** 2011  
Assam Engineering College, Jalukbari, Assam

**HSSLC/10+2 STD.: SCIENCE** 2006  
Tihu College, Tihu, Assam  
Assam Higher Secondary Education Council (AHSEC)

**HSLC/10TH STD.** 2004  
B.M.R. Navoday Vidyapith, Assam  
Board of Secondary Education, Assam (SEBA)

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## CERTIFICATIONS

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- Graduate Aptitude Test of Engineering (GATE)-2013, 2015, 2018
- Universal Human Values (UHV-II) by AICTE (2022)
- Post Graduate Diploma in Computer applications (PGDCA) -2012
- Certified Electrical Supervisor by Electrical Licensing Board, Govt. of Assam

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## SOFTWARE SKILLS

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- Programming with C/C++
- MATLAB & SIMULINK, SCILAB
- Programmable Logic Control (PLC)
- Virtual Instrumentation
- PSCAD
- LATEX

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## MEMBERSHIP OF PROFESSIONAL BODIES

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- Member of Institute of Electrical and Electronics Engineers (IEEE)
- Member of IEEE Young Professionals
- Member of IEEE Transportation Electrification Council
- Life time member of The Institution of Engineers, India (IEI)
- Life time member of Indian Society for Technical Education (ISTE)
- Life time member of International Society for Research and Development (ISRDR)
- Life time member of International Association of Engineers (IAENG)

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## RESEARCH INTEREST

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- Power System Reliability
- Distributed Generation Systems
- Electric Vehicles and Charging Technology
- Renewable Energy Integration
- Power System Operation and Control
- Smart Grid , Micro Grid

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## PROJECT

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- **CONSULTANCY PROJECT:** *Parallel Synchronization of DG Set with Solar Plant*  
Funded by: M/S RENERGY Solutions Private Limited, Incubation Centre, IIT Guwahati  
Gross Amount: INR 259,600.00/-  
Duration: ONE YEAR (2019-2020)  
Status: Completed
- **UNDERGRADUATE PROJECT GUIDED: 25+**

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## THEORY COURSES TAKEN (UG)

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Power Systems, Electrical Machines, Power System Operation and Control, Electric & Hybrid Vehicles, Reliability Engineering, Basic Electrical Engineering, Electro-Technology, Power Electronics, Signals & Systems, Advanced Control Systems, Renewable Energy Sources, Digital Systems.

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## LABORATORY COURSES TAKEN (UG)

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Basic Electrical Engineering Lab, Electrical Machines –I & II Lab, Power System Lab, Power System Operation and Control Lab, Electro-technology Lab and Control Systems Lab, Digital Electronics Lab.

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## PUBLICATIONS

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- JOURNAL, Reliability Analysis of an Active Distribution Network integrated with Solar, Wind and Tidal Energy Sources, International transactions on electrical energy systems, 2021, 10.1002/2050-7038.13201, (SCIE, SCOPUS Indexed)
- JOURNAL, An Approach to Reliability Modeling and Availability Analysis of a Solar Electric Vehicle with Stand-by Plug-in Facility, International transactions on electrical energy systems, 2021, 10.1002/2050-7038.13147, (SCIE, SCOPUS Indexed)

- JOURNAL, An Approach to Reliability, Availability and Maintainability Analysis of a Plug-In Electric Vehicle, World Electric Vehicle Journal, 2021, 12, 34, 10.3390/wevj12010034, (SCOPUS indexed)
- JOURNAL, An Approach to Solve Unit Commitment Problems considering Reliability as a Constraint, International Journal of Computer Sciences and Engineering, 2016, 04, 07, 30-33, (UGC Approved)
- JOURNAL, Smartphone assist deep neural network model to recognize the high-quality tea using leaf maturity and its effect on leaf chlorophyll, Journal of Applied and Natural Science, 2021, 13, 4, 1249–1255, (SCOPUS indexed)
- BOOK CHAPTER, Reconfiguration of Radial Distribution Network Implementing TLBO Algorithm for Loss Minimization and Reliability Improvement, Intelligent Techniques and Applications in Science and Technology, Springer International Publishing, 2020, 10.1007/978-3-030-42363-6\_19
- BOOK CHAPTER, Impact of Modified Static Series Synchronous Compensator in Enhancing the AGC Performance of Multiple Unit Power System, Intelligent Techniques and Applications in Science and Technology, Springer International Publishing, 2020, 10.1007/978-3-030-42363-6\_19
- CONFERENCE, An Approach to System Health Analysis for Generation Expansion Planning, National Conference on Emerging Global Trends in Engineering and Technology, 2014, OP1002
- CONFERENCE, An Approach to System Health Analysis for Generating Unit Maintenance Scheduling, National seminar on Recent Challenges and future Issues of power system operation in Indian context, 2014, NIT Silchar.
- CONFERENCE, An Approach to Solve Unit Commitment Problems considering reliability as a constraint, National Conference on recent innovative trends in Engineering & Technology, NCRITET-16, 2016, GIMT, Guwahati, Assam, India
- CONFERENCE, Adequacy Assessment of a System utilizing Solar and Wind Energy Sources, National Exhibition & Conference on New and Renewable Energy (NECONRE-2017), 2017, Assam Don Bosco University (ADBU)
- CONFERENCE, Effects of Wind Power on Bulk System Reliability Evaluation Using Well-Being Framework, National Conference on Non-Conventional Energy: Harvesting Technology and Its Challenges (NCEHTC-2017), 2017, Assam Engineering College, Assam, India
- CONFERENCE, Reliability evaluation of a small Isolated power System utilizing renewable energy, National Conference on Recent Advances in Science & Technology (NCRASST-2018), 2018, Assam Science and Technology University
- CONFERENCE, Modeling of a photovoltaic system and Reliability Assessment, International Conference on Renewable and Alternate Energy (ICRAE-2018), 2018, Assam Science and Technology University
- CONFERENCE, Distribution System Reliability Assessment Incorporating Distributed Generation, National Conference on Recent Advances in Science and Technology (NCRASST-2019), 2019, Assam Science and Technology University
- CONFERENCE, Classical controller based AGC of a hybrid multisource power system incorporating distributed generation, Current Trends in Renewable and Alternate Energy, 2019, 2091, 020002, 10.1063/1.5096493
- CONFERENCE, An Approach to Adequacy Assessment of Renewable Microgrid, National Conference on Emerging Trends in Energy and Electrical Systems (ETEES-2019), 2019, Assam Engineering College
- CONFERENCE, Classical controller based AGC of a hybrid multisource power system incorporating distributed generation, AIP Conference Proceedings, 2019, 2091, 1, 020002
- CONFERENCE, Reliability Centered Capacity reserve Management in Deregulated Power Market, 2022 IEEE International Conference on Power Electronics, Smart Grid, and Renewable Energy (IEEE-PESGRE)
- CONFERENCE, Reliability Analysis of Electric Vehicle integrated Distribution Network, 2nd IEEE IAS International Conference on Computational Performance Evaluation (ComPE-2021), 2021

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### **VALUE ADDED COURSE/FDP/STTP/WORKSHOP ATTENDED**

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- One week Short Term Training Course on “*Academic Leadership and Classroom Management*” organized by National Institute of Technical Teachers' Training & Research (NITTTR)-Chennai from 9<sup>th</sup>-13<sup>th</sup> September, 2024.
- One week Short Term Training Course on “*Designing Tools for Outcome Bases Assessment*” organized by National Institute of Technical Teachers' Training & Research (NITTTR)-Kolkata from 16<sup>th</sup>-20<sup>th</sup> September 2024.

- One week Short Term Training Course on “*Smart Grid and Renewable Energy Sources*” organized by National Institute of Technical Teachers' Training & Research (NITTTR)-Chandigarh from 23<sup>th</sup>-27<sup>th</sup> September 2024.
- *PLC Programming and its Applications*: Completed One week FDP organized by National Institute of Technical Teachers' Training & Research, NITTTR, Kolkata, from 30th January to 03rd February, 2023.
- *Recent Advances in Transmission Insulator*: NPTEL-AICTE Certificate Course under SWAYAM ( score: 96%, credit-1)
- *Advances in UHV Transmission and Distribution*: NPTEL-AICTE Certificate Course under SWAYAM (score: 66%, credit-1) during July-September 2022
- *Role of a Faculty to Adopt Moral Values and Ethics in Research and Publication: Unraveling the Facts of Publish and Perish*, Organized by Girijananda Chowdhury Institute of Pharmaceutical Science (GIPS) during 20-25 June 2022
- A Course on *Electric Vehicle Design* at Pantech E-Learning pvt. Ltd. during 20 June-19 July, 2022
- *Inculcating Universal Human Values in Technical Education*, organized by All India Council for Technical Education (AICTE), from 21 June to 25 June, 2021
- *Design and Implementation of Technical Curricula in Recent Perspective*, organized by National Institute of Technical Teachers' Training & Research, NITTTR, Kolkata, on 15-19 November, 2016.
- *Estimating and Costing of Non-Conventional Energies*, organized by National Institute of Technical Teachers' Training & Research, NITTTR, Kolkata, on 13-17th November, 2017
- *Engineering Application using MATLAB Programming*, organized by National Institute of Technical Teachers' Training & Research, NITTTR, Chennai, on 21-25 December, 2022.
- *Integration of Smart Grid & Renewable Energy Sources*, a MHRD, TEQIP-III Sponsored FDP organised by Department of Electrical Engineering, Assam Engineering College, 26-30 November, 2018
- *Recent Development in Teaching and Research*, an AICTE sponsored STTP organized by the Department of MBA, GIMT, Guwahati on 15-20 March, 2021.
- Five-Day FDP on “*Instrumentation, Operation, and Control of Electrical Power Systems*”, Sponsored by ASTU under TEQIP-III Scheme, MHRD, New Delhi, during 01-05 March, 2021
- *Writing Effective Collaborative Research Proposals*, a MHRD, TEQIP-III Sponsored FDP organised by Assam Science & Technology University on January 27, 2020.
- *Engaging Today's Learner*, a MHRD, TEQIP-III Sponsored FDP organized by Assam Science and Technology University (ASTU) in association with Department of AEI, GIMT, Guwahati, under TEQIP-III scheme of MHRD, New Delhi, during 9-14 December, 2019.
- *Recent Trends in Energy Sector with Special Emphasis on North-East*, AICTE-ISTE approved Induction/Refresher Program organized by Gyan Sagar Foundation Group of Institutions, Assam during 18th-23rd June, 2018.
- *Recent Trends in Power Engineering and Management*, an AICTE- NEQIP sponsored STTP organized in Assam Engineering College on 19-23 January, 2015.
- *Application of LabView in Technical Education and Research*, a MHRD-TEQIP-III sponsored STTP conducted by ASTU at GIMT during 28th January to 1st February, 2019
- *Power Electronics and Drive Systems*, a MHRD-TEQIP-III sponsored STTP conducted by ASTU at GIMT during 26-30 August, 2019.

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### **WORKSHOP/FDP/SEMINAR ORGANIZED**

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- Five-Day FDP on "*Universal Human Values (UHV-II)*" sponsored by AICTE organized at Girijananda Chowdhury University, Assam during January 8-12, 2024.
- Two-Day workshop on “*Fuzzy Logic Applications in Engineering*”, Sponsored by AICTE under TEQIP-III, organized at GIMT Guwahati on May 17-18, 2019
- Five-Day Short-Term Course on “*Advanced Learning of MATLAB and Simulink and their applications in Electrical Engineering*”, Sponsored by AICTE under TEQIP-III, organized on 19th-23rd March, 2018.
- Two-Day National Workshop on “*Modern Power Engineering Trends and Practices in India*”, Sponsored by AICTE under TEQIP-III, organized on 21-22 September, 2018.
- Symposium-16 on “*Aspects of Renewable energy in the North Eastern Region of India*”, at Girijananda Chowdhury Institute of Management and Technology, Guwahati on 8th April, 2016



- Two-week long Skill Development Workshop on “*Process Automation using PLC & SCADA*” at GIMT, Guwahati from 23rd Aug to 2nd September, 2016.
- One week Cultural Exchange Program titled ‘*Ek Bharat Shreshtha Bharat*’ under *Azadi Ka Amrit Mahotsav*, Ministry of Education, Govt. of India, Organized as a coordinator on 7th to 11th March, 2022 at Girijananda Chowdhury Institute of Management and Technology, Guwahati
- Webinar on the theme, “*New Education Policies in India: Opportunities and Challenges*” on the occasion of International Literacy day, organized as a coordinator on 27<sup>th</sup> June, 2022 at Girijananda Chowdhury Institute of Management and Technology, Guwahati
- Webinar on “*Intellectual Property Rights: Importance and its Implications in Indian Context*” as a part of Impact Lecture Series, IIC Cell, GIMT, Guwahati, organized as coordinator, on 27<sup>th</sup> June, 2022
- Seminar on topic, “*Entrepreneurship and Business Opportunities in Assam*” at GIMT, Guwahati, organized as Coordinator on 29<sup>th</sup> June, 2022
- Workshop on “*Masterclass in Latex: A typesetting Tool*”, Organized as Coordinator on 30<sup>th</sup> April, 2022 at GIMT, Guwahati
- Webinar on the theme, “*Technical Education Scenario Post COVID-19 Lockdown: Challenges & Opportunities*” organized as coordinator at at Girijananda Chowdhury Institute of Management and Technology, Guwahati on 13<sup>th</sup> of May, 2020
- *AICTE SMART INDIA HACKATHON-2017*, Grand Finale at the Nodal Centre GIMT, Guwahati (organized as Coordinator)
- *AICTE SMART INDIA HACKATHON-2018*, Grand Finale on 30<sup>th</sup>-31<sup>st</sup> March, at the Nodal Centre GIMT, Guwahati (organized as Coordinator)

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### **PARTICIPATION AS RESOURCE PERSON**

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- FDP on *Application of ICT Tool for Online Classroom Delivery*, organized by E&ICT Academy IIT Guwahati in association with ICT Cell, Nono College, Nagaon during 23 – 29 May, 2022
- Workshop on *Masterclass in Latex: A typesetting Tool*, organized by the department of Electrical Engineering, GIMT, Guwahati on 30<sup>th</sup> April, 2022
- FDP on *Research Methodology and Online Teaching*, organized by E&ICT Academy IIT Guwahati in association with North Eastern Regional Institute of Science and Technology, Arunachal Pradesh and support from Mantra Associates during 17 – 22 January, 2022.
- Workshop on *Latex: A Powerful tool for Technical Writing*, Organised by University of Science and Technology Meghalaya (USTM) in association with Mantra Associates during 25-30 April, 2022
- FDP on *Mentoring Pedagogy & Application of ICT Tools for Online Classroom Delivery of Teachers*, Organized by Mantra Associates and E&ICT Academy, in association with Birjhora Kanya Mahavidyalaya & CIT Kokrajhar during 14-19 December, 2020
- Workshop on "*Capacity Building and Team Work for Effective Operational of Office*", Organized By Bineswar Brahma Engineering College, Kokrajhar, on September 24, 2019
- Workshop on *MATLAB AND ITS ENGINEERING APPLICATIONS*, organized by the Department of Electrical Engineering, Assam Engineering College, Jalukbari on 22-23 September, 2023.

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### **OTHER INFORMATION**

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- Reviewer of some reputed international journals,
  - Newspaper Columnist
  - Interested in Music, Literature, Photography, Fitness and Travelling
  - Birth Place: Bargaon (Tihu), Nalbari, Assam-781371
  - Nationality: Indian
  - Religion: Humanity
  - Language: Assamese, Hindi, English
  - Favorite Quotes:
    1. Life isn't about finding yourself. Life is about creating yourself."~ George Bernard Shaw
    2. Many of life's failures are people who did not realize how close they were to success when they gave up."~ Thomas A. Edison
    3. If you cannot do great things, do small things in a great way."~ Napoleon Hill
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