



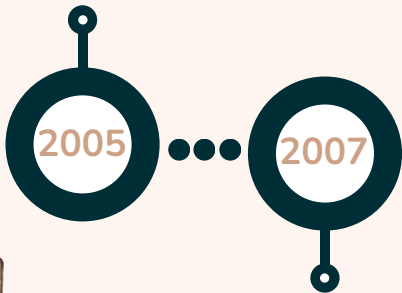
## Branch at a Glance

# DEPARTMENT OF ELECTRICAL ENGINEERING

The Electrical Engineering department, established in February 2005, originated from the Electrical Engineering Section within the Mining Machinery Engineering department, operational since 1975. Initially, serving as an integral part of the B.Tech. Mining Machinery Engineering program, it gradually expanded its scope to offer diverse electrical engineering courses and fostered a robust research environment, contributing significantly to academic publications and advanced degree programs.



Department established on



Officially started working from (with B.Tech)

### DOMAINS OF STUDY

- Power Systems Engineering
- Control Systems Engineering
- Electronics and Instrumentation
- Renewable Energy and Sustainability
- Power Electronics and Drives
- Advanced Electrical Machines
- Electromagnetic Theory and Applications
- Microprocessor and Microcontroller Applications
- Industrial Instrumentation and Applications

### LABORATORIES - UG, PG

- Advanced Electrical Machine Laboratory
- Advanced power System Laboratory
- Networks Laboratory
- Analog and Digital Electronics Laboratory
- Control and Measurements Laboratory
- Electrical Machine and Power Laboratory
- Microprocessor and Microcontroller Laboratory
- Electrical Machine and Control Laboratory
- Power and Switchgear Laboratory

Courses	Strength
B.Tech	128
M. Tech	30
Grand Total	158

### PLACEMENTS & INTERNSHIPS

**51+ LPA** **17.7+ LPA**  
Max. CTC Median CTC

**61k / mo**  
Median Stipend during Internship

#### Core Companies



& more...



# Research & Development

## Meet our HOD



### PROF. SUKANTA DAS

(Associate Professor)

01-09-2010- Present

BE in Electrical Engineering from Jalpaiguri Govt. Engineering College (2002)

Masters of Engineering (ME) in Electrical Engineering (2004)

Doctor of Philosophy (Ph.D.) in Engg. [Power Electronics & Drives] (2013)

#### Primary Areas of Research

Electrical Machines and Drives: Design of Electrical Machines, Various Energy Efficient Control Aspects of Induction Motor Drives, Fault Tolerant Control of Induction Motor Drives, Fast Charging of Electric Vehicle, Condition Monitoring of Electrical Machines.



**Citations 4873**  
**H-index 31**

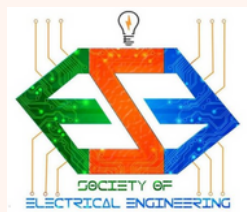
### Ongoing & Completed Departmental Research

- Execution of a Common Approach for Current Sensor Fault-Tolerant Control of Induction Motor Drives in Different Control Regimes.
  - Sponsored by & Project No.: SERB (DST), File No. CRG/2019/00384 [DST(SERB) (249)/2019-2020/696/ EE]
  - Cost (Lakhs): 46.86264, Duration: Three years, Status: On-going
- Development of Energy Efficient Control Scheme for Induction Motor Drive Used in EV and HEV
  - Sponsored by & Project No.: Department of Heavy Industries in Collaboration with Mahindra & Mahindra Ltd. [7(11)/2019-AEI (20739)].
  - Cost (Lakhs): 84.37, Duration: Three years, Status: On-going
- Sensorless Speed Control of Brushless Doubly-Fed Reluctance Motor Drive Utilizing Model Reference Adaptive Controller
  - Sponsored by & Project No.: SERB (DST), File No. YSS/2015/001670 [DST(SERB) (134)/2015-2016/458/ EE]
  - Cost (Lakhs): 30.85, Duration: Three years, Status: Completed
- Design and Implementation of Wavelet Transform based Notch Filter to Denoise Synchronizing Signal in Power Electronics Converters under Harmonics Polluted Environment.
  - Sponsored by & Project No.: IIT(ISM), Dhanbad & FRS(35)/2012-2013/EE
  - Cost (Lakhs): 10.00, Duration: Three years, Status: Completed
- Hardware Feature Enhancement of Existing MCK28335 Kit C Pro-S (IM) for Conducting Research Activity in Industry Standard Vector Control Drive Applications.
  - Sponsored by & Project No.: Minor Research Project under TEQIP-II, [vide letter dated 22.07.2013]
  - Cost (Lakhs): 1.00, Duration: One year, Status: Completed
- Development of fiber optic vibration sensor for measurement of cardiac
  - Sponsored by: IIT ISM, Cost (Lakhs): 10.0, Status: Complete
- Online Condition Monitoring of Heavy Duty Electrical Drives
  - Sponsored by: IIT ISM, Cost (Lakhs): 9.37, Status: Complete





## Active Student Run Societies



### Aims of the Society

The Society of Electrical Engineering aims to build a community of students and alums who are strongly motivated to work on the the field of electrical and alumni intersection. The society is formed with an aim to introduce the students to the sea of opportunities associated with the field of Electrical Engineering.

### Alumni Network

- Kumar Rajesh Singh - Global Managing Director at ReVal Consulting Private Limited
- Rohit Kumar Singh - Vice President & Account Head at GEMS (GMR Engineering & Management Services)
- Sumit Shikhar - Director, Bids and Project Development ME at EDF Renouvelables
- Sanjay K Prasad - Distinguished Engineer, Global Industry - Energy and Natural Resources at IBM
- Viswakumar Ananthakrishnan - Chief Purchasing Officer at RUSTA AB
- Dr. Astha Sharma - Assistant Director of Technology, Bharat 6G Alliance / Innovation & Technology Enthusiasts

### GATE Results

#### Overall

- Rupam Raj - AIR 2 (2020)
- Piyush Kumar Gupta - AIR 5 (2018)
- Sushant Jain - AIR 42 (2022)
- Aikya Maji - AIR 622 (2024)
- Piyush Pandey - AIR 22 (2022)
- Anant Sharma - AIR 1027 (2024)
- Ankit Singh - AIR 1125 (2021)

