

# M. TECH PROGRAM IN ELECTRICAL ENGINEERING POWER AND ENERGY SYSTEMS (PES) SPECIALIZATION



Department of Electrical Engineering  
IIEST Shibpur

# At a Glance

- Faculty Strength in PES Specialization: 08
- Number of Seats in PES: 11
- GATE Test Paper for Entry: Electrical Engineering (EE)
- Program Duration: 4-Semesters

## Thrust Area of PES Specialization

- Applications of AI, ML & Optimization Techniques in Power System Operation, Monitoring & Control
- Battery Management System for Electric Vehicles
- Grid Integration of Renewable Energy, Grid Resilience and Reliability
- Condition Monitoring and Fault Diagnosis of Electrical Equipment
- Dielectrics for High Voltage Systems



# Major Courses in offer in the PES Specialization

- Computer Aided Power System Analysis
- Power System Operation and Control
- Power Transmission and Power Quality
- Advanced Power System Protection
- High Voltage Systems
- Artificial Intelligence and Optimization in Power Systems
- High-Performance Computation (HPC) for AI Applications
- Power system Reliability and Load Forecasting
- Grid Integration of Renewable Energy
- Restructured Power Systems
- Smart Grid Technologies and Energy Informatics





# Prospective Employers

