COURSE FEE

Students: INR 10000+GST
Post-Docs: INR 12000+GST
Faculty: INR 14000+GST
Industry: INR 16000+GST

WHO CAN BENEFIT

Engineering students, postdocs, academic faculty, and industry professionals in electrical power, data centers, and AI infrastructure seeking expertise in grid integration, power delivery, cooling systems, stability, and simulations.

CONTACT US

Centre for Continuing Education (CCE) Indian Institute of Science (IISc) Bengaluru Phone: 080-2293-2055/2491/2247
www.cce.iisc.ac.in



OBJECTIVES

This workshop explores the grid integration of AI data centers, covering power delivery, cooling systems, stability challenges, cybersecurity, market tariffs, and practical simulation sessions to prepare participants for future demands.

ELIGIBILITY

B.Tech/B.E

CONTENTS

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WORKSHOP ON GRID INTEGRATION OF AI DATA CENTERS: CURRENT STATUS, AND PATH AHEAD

Date : 17 to 19 December, 2026
Time : 9:00 AM to 06:00 PM

Course Coordinator:
Prof. Sarasij Das, Department of Electrical Engineering,IISc



SPEAKERS

- Prof Vladimir Terzija, Newcastle University, UK
- Dr. Deep Deka, MIT, USA
- Prof Saurabh Amin, MIT, USA
- Prof Sukumar Kamalasadan, University of North Carolina at Charlotte, USA
- Prof Sairaj Dhople, University of Minnesota, USA
- Prof Nilanjan Ray Chaudhuri, Penn State University, USA
- Prof Parikshit Pareek, IIT Roorkee
- Prof Pramod Kumar, Indian Institute of Science
- Prof Parimal Parag, Indian Institute of Science
- Prof Praveen Ramamurthy, Indian Institute of Science
- Prof Kaushik Basu, Indian Institute of Science
- Prof Vinod John, Indian Institute of Science
- Prof Sarasij Das, Indian Institute of Science
- Prof Prasad Enjeti, Texas A&M University, USA

SESSIONS

- Data Centres in the Modern Grid: AI Load Growth, Demand Trends and Grid Challenges
- Energy Aware AI Algorithm Scheduling and Running in Data Centres
- Power Delivery Architecture and Electrical Load Characteristics of AI Data Centre
- Cooling Systems and Cooling Loads in Data Centres
- Energy Water Connection in Data Centre and Impact on Environment
- Data Centre Planning, Siting and Flexibility
- Medium-Voltage Converters and Solid-State Transformers for Data Centres
- Power Electronics for AI Data Centre Servers
- Power System Dynamics and Stability Issues with Data Centre Loads
- Grid Codes and Modelling of Data Centres for Grid Connection Studies
- Limiting the Impact of AI Data Centres on Fatigue Life of Thermal Turbine Generators in the Grid
- Cybersecurity of Data Centre Infrastructure
- AI/ML Models for Data Centre Control
- Tariffs, and Electricity Markets for Data Centre Loads
- Building a Co-Simulation Suite for AI Data Centre–Power Grid Interactions: Design and Early Results
- Hands-on Session on MW-scale AI Data Centre Simulations

HANDS-ON SESSIONS

Hands-on Session on MW-scale AI Data Centre Simulations will be based on MATLAB Simulink

ACCOMODATION

Accomodation is limited and is available on first come first serve payment basis.

First 14 participants will be accomodated at JVH guest house (IISC Campus)
Double occupancy rooms are there at the guest house. The tarriff is 1000+ GST per person per day.

Next 20 participants will be accomodated at Hotel Shri Durga International, bus stand, 35/1, Gayathri Temple Rd, near Yeshawanthpura, Dr.Ambedkar Nagar, Yeshawanthapura, Bengaluru,
The tariff is 1200 + GST

IN-PERSON WORKSHOP

Scan QR to know more

Registration link

Registration Deadline: 15 November 2026

VENUE

Department of Electrical Engineering, Javanica Marg, Indian Institute of Science (IISc), Bengaluru, Karnataka 560012