



**IIT (ISM)
DHANBAD**
Dept. of Electrical
Engineering

IEEE POWER ELECTRONICS SOCIETY SPONSORED

Ph.D. Summer School 2026

on

"Power Converter Design, Digital Control and Battery Management Systems"

July
17
**July 13 – 17,
2026**

⚠ **LIMITED SEATS**

SCAN TO VISIT
THE WEBSITE

Department of Electrical Engineering · IIT (ISM) Dhanbad · Jharkhand, India

PROGRAMME HIGHLIGHTS

- Hands-on sessions on reliable control circuits for power converters
- Expert talks by speakers from IITs, NITs, Industry & Abroad
- 15-min research presentation by Ph.D. scholars + 5-min Q&A
- Kit & certificate** for all participants
- Cash prize & citation for top scholars (incl. IEEE WiE)
- Half-Day IEEE WiE Event (15 July)** — Keynote, Panel & Mentoring for Women in Power Electronics

PATRONS

CHIEF PATRON
Prof. Prem Vrat
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IEEE PELS DISTINGUISHED LECTURER
Prof. Akshay Kumar Rathore
NUS, Singapore

HEAD OF DEPARTMENT, EE
Prof. Sukanta Das
IIT (ISM) Dhanbad

REGISTRATION FEE

IEEE Student	₹ 1,500 + 18% GST
Non-IEEE Student	₹ 1,800 + 18% GST
IEEE Member (Non-Student)	₹ 1,800 + 18% GST
Staff / Industry / Faculty	₹ 8,000 + 18% GST

Registration fee includes the training kit, certificate of participation, and snacks.

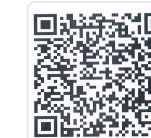
KEY DATES

Application opens	Now
Application deadline	June 24, 2026
Payment	During application
Verification email	2-3 working days
Summer School	July 13 – 17, 2026

ORGANISED BY

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ABOUT IIT (ISM) DHANBAD · CENTENARY 1926–2026

The **Indian Institute of Technology (Indian School of Mines), Dhanbad** is an **Institute of National Importance** under the Ministry of Education, Government of India. Established on 9 December 1926 by Lord Irwin and elevated to IIT status on 6 September 2016, the institute is located in the prime coking-coal belt of India, ~260 km from Kolkata. In 2026, IIT (ISM) celebrates its **centenary year** — and this Summer School is held as part of the Centenary Celebrations.

IIT (ISM) is **ranked 15th in Engineering (NIRF 2025)**, producing **2,000+ SCI/Scopus publications** annually and **300+ patents** filed. With 18 academic departments, it offers B.Tech., Integrated M.Tech., M.Sc., M.Sc.Tech., MBA and Ph.D. programmes.

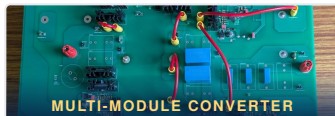
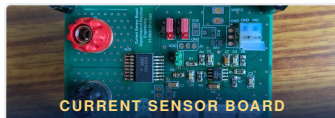
DEPARTMENT OF ELECTRICAL ENGINEERING

Formally established in February 2005, the legacy of EE at IIT (ISM) traces back to the institute's inception — initially under the Department of Engineering and later alongside Mining Machinery Engineering. Today the department runs B.Tech., M.Tech., and Ph.D. programmes with a curriculum that balances rigorous theory and hands-on practice across **Power Systems, Power Electronics & Drives, Control & Automation, Instrumentation, and Communication & Signal Processing**. It is supported by modern, well-equipped laboratories, sponsored research projects, and active industry collaborations, with faculty publishing extensively in leading IEEE and Elsevier journals.

POWER ELECTRONICS LABORATORY

The Power Electronics Laboratory is dedicated to advanced research in **power conversion, intelligent digital control, and energy management**, spanning isolated and non-isolated DC-DC, DC-AC, and AC-DC converters, motor drives, renewable-energy integration, microgrids, EV charging, and battery management systems (BMS).

The lab is equipped with **FPGA / DSP-based digital controllers, real-time hardware-in-the-loop (HIL) platforms, wide-bandgap (SiC / GaN) converter prototypes**, high-precision measurement and signal-conditioning instruments, and in-house designed gate-driver, sensor, and converter boards — enabling the full design-to-prototype workflow demonstrated in the Summer School's hands-on sessions.



ABOUT THE PH.D. SUMMER SCHOOL 2026

The **IEEE PELS Sponsored Ph.D. Summer School 2026**, hosted by the Department of Electrical Engineering, IIT (ISM) Dhanbad, is organised on the theme **"Power Converter Design, Digital Control and Battery Management Systems."** It brings together leading academic experts, industry professionals, and aspiring researchers to advance knowledge in this rapidly evolving domain.

The programme features **invited lectures** on the hardware and software design of power converters, digital control techniques, and modern battery management systems, complemented by **hands-on sessions** on schematic and layout design of driver circuits, converter prototype testing, and reliable feedback/signal-conditioning circuits for closed-loop control.

A distinctive feature is the **Research Scholar Presentation Sessions**, where selected Ph.D. scholars in their 3rd or 4th year present their work for 15 minutes, followed by a 5-minute Q&A with the expert panel — offering valuable feedback ahead of their thesis defence.

IEEE WIE EVENT · HALF-DAY PROGRAMME

Wednesday, 15 July 2026 · 2:00 PM – 6:00 PM

Theme: "Women in Engineering & Leadership — Pioneering Change, Leading Innovation"

A **Keynote Address, Panel Discussion** on Women Leaders in Power Engineering, and a **Mentoring & Career Development Session** on GoI schemes & fellowships for women scientists (DST WOS, SERB POWER, INSPIRE).

WiE Chair: Dr. Kalpana R, NIT Tiruchirappalli (IEEE PELS DRL 2026–2028).

Panelist: Dr. Farheen Chishti (GE). **Moderator:** Dr. Sonam Acharya (IIT (ISM) Dhanbad).

COURSE INSTRUCTORS · IIT (ISM) DHANBAD

Prof. Sukanta Das

HoD · Power Electronics, Machine Drives

Prof. Ashok Kumar

Co-Convenor · Power Electronics, EV Charging

Prof. Sukanta Halder

EV Traction Drives, WBG Inverters, PMSM

Prof. Sethupathy S

Electric Machines, Linear Motors for EV

Prof. Ananda Shankar Hati

Convener · AI-based Drives, PHM, HVAC

Prof. Anirban Ghoshal

Power Electronics, EV Fast Chargers

Prof. Soumyabrata Barik

Distributed Generation, Microgrids

TECHNICAL COORDINATOR

Shri Mihir Datta

Technical Superintendent · Power Electronics Lab, Dept. of EE, IIT (ISM) Dhanbad

DISTINGUISHED GUEST LECTURERS



Prof. Akshay Kumar Rathore

NUS, Singapore · IEEE PELS Distinguished Lecturer · Mentor



Prof. Sumit Pramanick

Power Electronics Applications Research Lab (PEARL), Dept. of EE, IIT Delhi



Dr. Sreenivasa S. Jaldanki

Oak Ridge National Laboratory · Tennessee, USA



Dr. Anirudh Acharya

Senior R&D Engineer, Yaskawa (The Switch) · Power Electronics for Renewables & Drives

APPLICATION & SELECTION

- Apply online via the official webpage: <https://people.iitism.ac.in/~summerschoolee>
- Registration is on a **first-come, first-served** basis. Seats are limited.
- **Fee payment is part of the application** — scan the UPI QR inside the form and upload payment screenshot before submitting.
- Verification & final seat-confirmation by email within **2-3 working days**.
- Ph.D. scholars in **3rd / 4th year** are encouraged to apply for the Research Presentation slot.

ACCOMMODATION & VENUE

Hostel — Students: IIT (ISM) hostels on a first-come, first-served basis, subject to availability, at **₹ 500 per day (including accommodation & meals)**.

Faculty / Staff: Executive Hostel on a first-come, first-served basis, subject to availability.

Venue: Department of Electrical Engineering, IIT (ISM) Dhanbad – 826 004, Jharkhand, India

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SPONSORSHIP OPPORTUNITIES

Partner With Us

Power the Next Generation of Power Electronics Leaders

★ WHY NOW

Connect with 130+ Ph.D. scholars and early-career researchers from IITs, NITs, IISc, and leading universities. **In-kind sponsorships** (hardware, software, training kits) and **custom packages** are warmly welcomed — reach out to the Convener for a tailored proposal.

B

BRAND VISIBILITY

Logo across brochures, website, banners, kits, certificates and on-stage acknowledgement throughout the 5-day Summer School and Centenary platform.

T

TOP TALENT ACCESS

Direct connect with the brightest **Ph.D. scholars** in power electronics, digital control and battery systems — your future hires & collaborators.

R

INDUSTRY-ACADEMIA BRIDGE

Showcase your R&D, products, and careers through dedicated industry sessions, product demos, technical talks and exhibit booths.

L

CSR & LEADERSHIP

Demonstrate commitment to engineering education, women-in-engineering and sustainable energy through an IEEE-endorsed academic programme.

BENEFITS / VISIBILITY Tier-wise sponsorship inclusions	PLATINUM ₹ 3,00,000+ + 18% GST	GOLD ₹ 1,50,000+ + 18% GST	SILVER ₹ 75,000+ + 18% GST	BRONZE ₹ 30,000+ + 18% GST
Logo on Brochure, Website & Banners	★ Title	★ Large	★ Medium	★ Small
Logo on Participant Kit & Certificate	✓ Yes	✓ Yes	✓ Yes	—
Dedicated Industry / Tech Talk Slot	45 min	30 min	15 min	—
Exhibit / Demo Booth at Venue	Premium	Standard	Shared	—
Brochure Insert & Welcome-Kit Material	✓ Full	✓ Yes	✓ Flyer	—
Access to Participant CVs (Recruitment)	✓ Yes	✓ Yes	—	—
Sponsor an Award (Cash Prize + Citation)	Best Paper	Best Presentation	WIE / Other	—
Inaugural / Valedictory Ceremony Mention	Keynote intro	Stage mention	Acknowledged	Listed
Social Media & Press Coverage	Featured	Dedicated	Tagged	Listed
Networking Dinner Invitation (Sponsor Reps)	4 passes	2 passes	1 pass	1 pass

Note: All sponsorship amounts are exclusive of **18% GST**, which will be added to the invoice as per applicable rates. Custom packages, in-kind sponsorships, and travel-grant partnerships are also welcome.

HOW TO SPONSOR — SIMPLE 4-STEP PROCESS

Become a Partner

All sponsorships are recognised under the IIT (ISM) Centenary Year — a once-in-a-century opportunity.

- 1 Email or call us to express interest & preferred tier
- 2 Receive sponsorship MoU & deliverables checklist
- 3 Share logo, branding material & payment (NEFT / UPI / DD)
- 4 We onboard, announce & activate your sponsor benefits

SPONSORSHIP CONTACTS

SPONSORSHIP CONVENER

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🌐 <https://people.iitism.ac.in/~summerschoolee> · Let's build the future of power electronics — together.