



IEEE Power Electronics Society sponsored
Ph.D. Summer School
on
**“Designing Reliable
Control Circuits for Power
Converters”**

July 19th – July 23th, 2025



Insights:

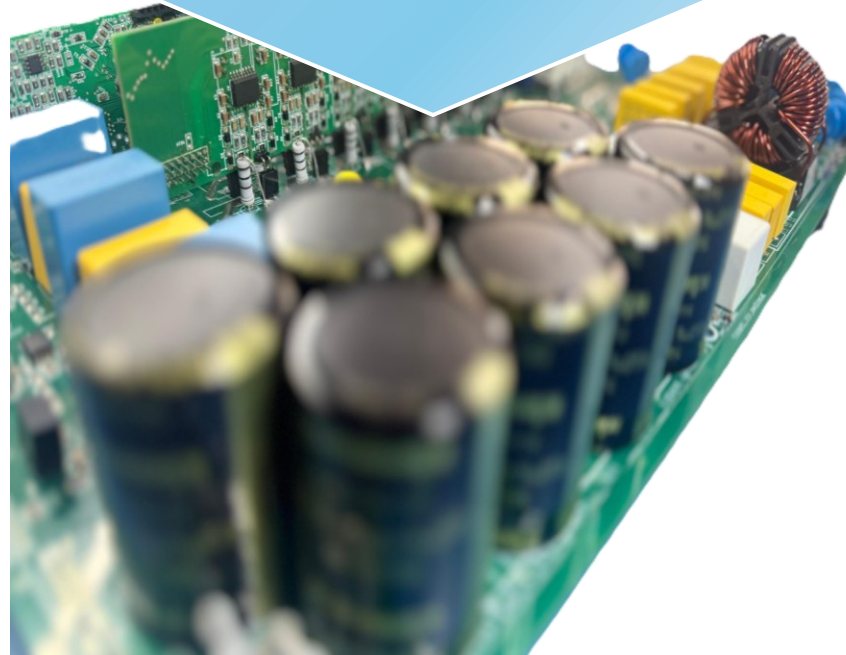
- Practical sessions on “Designing reliable control circuits for power converters”
- Talks by experts from IITs, NITs, Industry & abroad
- 20 minutes presentation by Ph.D. students followed by a 10 minutes Q&A session.

Registration Fee (INR):(excl. GST)

IEEE Student members: 1500/-
Non-IEEE Student members: 1800/-
Staff/Industry Professional: 8000/-

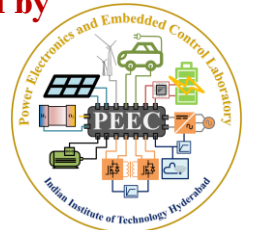


Webpage: <https://IEEE-PELS-PhDSchool2025.ee.iith.ac.in>



భారతీయ సాంకేతిక విజ్ఞాన సంస్థ హైదరాబాద్
भारतीय प्रौद्योगिकी संस्थान हैदराबाद
Indian Institute of Technology Hyderabad

Organized by



Dr. Rupesh Wandhare,
Associate Professor, Dept. of Electrical
Engineering, IIT Hyderabad
✉ rupesh@ee.iith.ac.in

Mentored by

Prof. Vivek Agarwal, IEEE Fellow, IITB; Prof. Sanjib K. Panda, PEL-DL, NUS; Prof. K. Sivakumar, IITH; Prof. Jose Titus, IITH; Prof. G. Siva Kumar, NITW; Prof. Srinivas B. Karanki, IITBbs and Prof. Manmath Badapanda, RRCAT.

About IIT Hyderabad



Indian Institute of Technology Hyderabad (IITH) is a premier institute of science and technology established in 2008. IITH has been consistently ranked in the top 10 institutes in India for Engineering according to NIRF making it one of the most coveted institutes for science and technology in the country. The very foundation of IIT Hyderabad is based on research and innovation. The vibrant research culture is evident from the number of patents, technologies and publications that IITH produces consistently every year.

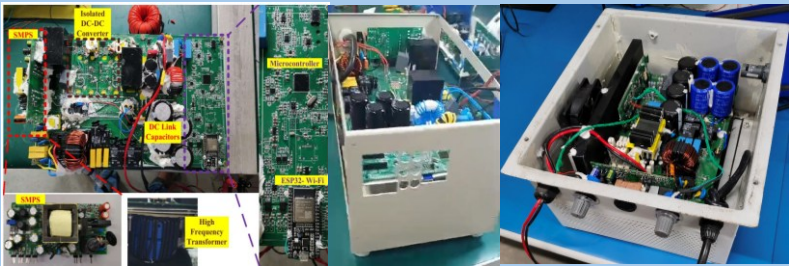
About Department of Electrical Engineering, IITH

The Department of Electrical Engineering (EE) at IIT Hyderabad offers a vibrant environment for undergraduate, post graduate education and research in many areas of Electrical Engineering. We are a team of 38 faculty , 621 students (320 BTech, 145 MTech and 156 PhD) and 16 staff members engaged in cutting edge research and teaching in several frontier areas of Electrical Engineering.

About PEEC Laboratory

The Power Electronics & Embedded Control (PEEC) Lab, led by Dr. Rupesh Wandhare, is dedicated to advanced research in power conversion and intelligent control systems. The lab focuses on both isolated and non-isolated DC-DC, DC-AC, and AC-DC power converters, catering to a broad spectrum of applications—from consumer electronics and household appliances to microgrids, renewable energy integration, and electric vehicle (EV) charging infrastructure. The lab hosts a vibrant research team comprising 7 Ph.D. scholars, 8 M.Tech. students, 4 B.Tech. students, and 1 Technical Assistant. Between 2019 and 2025, it has achieved 4 Patents, 40+ publications.

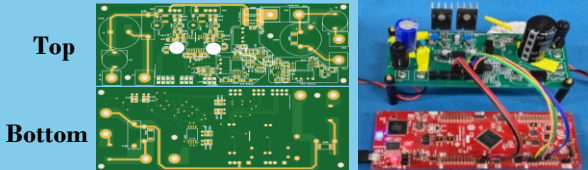
A few Pictures of technologies developed by PEEC



About the Ph.D. Summer School 2025

The theme of this year’s school is “Designing reliable control circuits for power converters”, which is sponsored by IEEE Power Electronics Society (PELS). There will be a series of lectures by renowned speakers from India and abroad, delivering knowledge on the hardware/software design of control circuits suitable for power converters. In addition, there will be Hands-On Sessions on the schematic, layout design, testing of modern driver circuits for power devices, and establishing reliable feedback mechanisms (signal conditioning circuits) for power converters. A few sessions will be spared for the selected PhD Scholars in their 3rd/4th year of PhD to present their research work for about 20 minutes, followed by a 10-minute Q&A. This will enable scholars to prepare for their upcoming research defence. At the end of the workshop, a few experimental kits will be awarded to deserving and outperforming participants (through evaluation). Certificates will be provided to all participants who successfully attend the Ph.D. Summer School.

Glimpse of Training kit provided for Hands-on section



About the Women In Engineering (WIE) event

IEEE Women in Engineering (WIE) sponsored events on women empowerment in the engineering sector will be conducted during ‘PhD School 2025’. Special sessions for women participants will be conducted to disseminate information on opportunities for women in power electronics and the various schemes undertaken by the Government of India for women scientists. Institute tour and visits to various power electronics laboratories in IIT Hyderabad will be arranged for WIE participants. Additional speaker (expert in the power electronics domain) will guide the WIE participants during IEEE PELS PhD School. Experimental kits will be awarded to deserving and outperforming WIE participants during research presentation event (through evaluation).

Application process:

All interested candidates are required to fill out the application form on available on <https://forms.gle/1m3KxZpX5sYd9nBp8>

Selection: After receiving applications, we will shortlist candidates based on the details filled up by them in the application form and based on first cum first-serve basis.

Registration: Selected candidates will have to complete final registration and payment by filling up a registration form which will be made available on the website after announcement of selected candidates, via email.



Location:

The workshop will be held at the Department of Electrical Engineering, IIT Hyderabad.



Distinguished Guest Lecturer



Prof. Sanjib Kumar Panda,
Dept. of Electrical & Computer Engineering,
National University of Singapore

Women In Engineering (WIE) Chair



Prof. Shreelakshmi M. P,
Dept. of Electrical Engineering,
National Institute of Technology Calicut

Registration Fee Details :

- IEEE student members: 1500+GST (18%) INR
- Non-IEEE student members: 1800+GST(18%) INR
- Industry Professionals / Research & Teaching Staff / Faculty : 8000+GST(18%) INR

Important Dates:

- Deadline for submission of applications form: **June 29, 2025 (6 pm)** (first cum first-serve basis)
- Email notifications to the selected candidates: **June 23 to June 30, 2025 (6 pm)**
- Submission of registration fee: **Within 2 days after receiving the email notification.**

Note:

- The registration fee includes attendance to all technical sessions including tea/coffee/snacks breaks, lunches (during July 19 -23, 2025) and a special dinner.
- Accommodation for the participants will be arranged in the hostels of IITH with free of cost.