Workshop (*Physical Mode*)

on
Battery Energy Storage Systems: A Laboratory Perspective
March 11-15, 2026

Funded By

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Organized By

IEEE Gujarat Section
IES - IAS - PELS Joint Chapter

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Resource Persons of the BESS - 2026

Faculty from NITs/IITs & EV Industry Experts

Venue of the BESS-2026

Advanced Power Electronics Laboratory (APEL), 2nd Floor, Room No. 202 in the Department of Electrical Engineering, SVNIT, Surat.

All the communication related to BESS-2026 should be made on this Email: apel@eed.svnit.ac.in

Major Highlights

- Li-ion cell modelling and its verification
- Thermal modelling of Li-ion cell and its verification
- Battery pack design and development using a spot welder.
- BMS design and operation with STM (EVAL-L9963E-MCU)
- PV/Wind simulator with grid operation.

Cell Testing Facility at DoEE, SVNIT, Surat


Fluke- TiS20+ MAX 9HZ


Environmental Chamber, ENVISYS, EM-100


Battery Test Equipment Neware, BTS 4000 5V100A-4CH


Programmable DC Load Itech, IT-M3902B-80-40


High-Quality Spot Welder, Koko Tawa Electra, KTS-B

Objectives of the Workshop

To provide participants with a comprehensive understanding of lithium-ion battery systems and BMS for safe and efficient operation. The workshop combines theory with hands-on practice, covering cell and thermal modeling with verification, battery pack design using a spot welder, BMS design and operation using **STM (EVAL-L9963E-MCU)**, and renewable PV/wind simulation with grid operation, along with data acquisition and GUI-based monitoring.

About Department of Elctrical Engineering

The Department of Electrical Engineering (DoEE) is one of the oldest departments established in 1961. Currently, the department offers B. Tech. in Electrical Engineering and B. Tech. Minor in Electrical Engineering for other discipline students, along with M. Tech. in Power Electronics and Electric Drives, M. Tech. in Power Systems and M. Tech. in Instrumentation and Control. Also, the department offers PhD programme in the research areas of power electronics and electrical drives, power systems, renewable energy, control systems, electrical vehicles and other area of electrical engineering. The department provides consultancy and electrical testing services to various industries, government and semi-government organizations.

About SVNIT, Surat

This institute was established in 1961 by the Parliament of India as Sardar Vallabhbhai Regional College of Engineering & Technology (SVRCET), Surat, to Sardar Vallabhbhai National Institute of Technology (SVNIT), Surat, with the status of "Deemed University" with effect from 4th December 2002. The institute has been granted the status of '**Institute of National Importance**' w.e.f. Aug. 15, 2007, by the Parliament of India. In 1961, SVRCET was imparting technical education in Civil, Mechanical and Electrical Engineering. In the year of 1983-84, the Undergraduate (UG) program in Electronics Engineering was introduced, and in the year of 1988-89, the UG program in Computer Engineering and Production Engineering was started. In the year of 1995-96, UG program in Chemical Engineering was introduced. At present, the Institute is offering Six UG Programs, Eighteen Postgraduate (PG) Programs and Three Five Years Integrated Master of Science (M.Sc.) Program in Chemistry, Physics and Mathematics, including doctoral programe in all these disciplines.

About Surat City

Surat city is situated on the bank of river Tapi, and high-ranking industrial city of the country with a strong network of roads & flyovers. It is well known worldwide for textiles, zari & diamond industries. Several large-scale industries and establishment are located in the vicinity of the city. The city is situated on the main western railway route between Vadodara and Mumbai. The institute is located at a distance of about 10 Km from Surat railway station.

Target Audience

Motivated B.Tech./M.Tech./PhD students and faculty members from Electrical Engineering or allied disciplines.

Important Dates

Last Date of Registration: ***06 March 2026***
Notification to selected participants: ***09 March 2026***
Workshop Dates: ***11-15 March 2026***

Accommodation, Travel and Food

- There is no registration fee.
- Registration includes complimentary breakfast, lunch, and tea each day.
- No TA/DA or travel fare will be provided.
- Accommodation for outside participants is available at the institute's guest house upon prior request and at an additional cost. For more details, please visit https://www.svnit.ac.in/web/guesthouse.php

Registration & Guidelines

- The course will be completely free of cost for the shortlisted participants.
- **The participants will be limited to the available seats.**
- **Active participation in lectures and discussion/interaction sessions, along with a basic-level evaluation, will be mandatory to obtain the course completion certificate.**
- SVNIT reserves the right to devise a well-defined shortlisting criterion for the selection of candidates based on the basic eligibility criteria.
- Interested persons may apply on the prescribed application form, scan it, and upload it to register through this link: https://forms.gle/XfG8bjTYeumJNAhA9 OR **Scan QR Code**

👉 Online Registration Link 👈

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