

About the Institute

The institute was initially established as Sardar Vallabhbhai Regional College of Engineering & Technology in 1961 and was upgraded as a National Institute of Technology on 4th October, 2002. SVNIT is one of the pioneering engineering institutions of the country which has contributed many outstanding engineers in India & abroad. It is conducting six UG programs, seventeen PG programs (in addition to three integrated M.Sc. programs) and a Ph.D. program in all disciplines of engineering and applied sciences. Special attention is given to interdisciplinary research. The institute has an excellent placement record with a number of top ranking companies visiting the campus every year.

About the Department

The department is one of the pioneering departments of the Institute. Over the years, the department has progressed at a rapid pace with development in both the spheres of infrastructure facilities and academic programs. The department has highly qualified faculty members engaged in teaching and research with the aim of achieving excellence in the field of Electrical Engineering. The department offers an Undergraduate course in Electrical Engineering and Postgraduate programs in Power Electronics & Electrical Drives and Power Systems. The department offers a Ph.D. program to promote basic research activities in the various areas of Electrical Engineering. The consultancy and testing services are also rendered by the department.

About the Surat

Surat is a top ranking industrial city of the country with clean wide roads. It is well known worldwide for textiles, Zari and Diamond industries. Several large scale industries and establishments are located in the city. Surat is situated on the main western railway route between Vadodara and Mumbai. The institute is located at Ichchanath on Surat-Dumas road at a distance of about 10 Km from Surat railway station.

About Training Program

Power Electronics and Drives became a part of modern civilization. The power converters and drives gained more importance due to their improved performance and high efficiency. The control of Power Electronics and Drives plays a vital role in many applications with a wide variety of systems. There are many classical methods available to control the power converters and drives. The advancement of digital controllers made the implementation of new control strategies to address the challenges of classical control methods.

This course aims to discuss the participant's recent advancement in the research and development of power converters and electrical drives. Evolution and applications of the converters, electronically commutated motors, Permanent Magnet (PM) synchronous motor, switched reluctance motor and their electronic controller will be discussed in the STTP.

Major Highlights:

Simulation and Laboratory sessions for demonstrating the development aspects of electrical drives using industry standard ARM Cortex-M4 32-bit microcontroller is arranged.

Topics to be covered:

- Is Induction Motor INFERIOR to DC Motor with regard to Dynamics?
- Electronically Commutated Synchronous Motors
- Selection of Motor for Electric Vehicles
- Power Electronics Interfacing to Renewable Energy Systems
- Power Electronic Converters and their Control Strategies
- PWM techniques for Power Electronic Converters
- STM32F4xx Microcontroller for Electrical Drives
- Demonstration of Induction motor drive development.
- Demonstration of electronically commutated DC (BLDC) motor and SRM drive
- Demonstration of PMSM drive
- Application of drives in water pumping system and its integration with solar PV

Call for Participation

One-Week Short-Term Training Program (Online)

on

Power Electronic Converters and Drives: Fundamentals, Implementation and Applications (PECD)

03rd October 2020 to 07th October 2020

Organizing Committee

Dr. Mahmadasraf A. Mulla
Dr. K. V. Praveen Kumar
Dr. J. Venkataramanaiah



Organized by
Department of Electrical Engineering
Sardar Vallabhbhai National Institute of
Technology, Surat.
(An Institute of National Importance of Govt.
of India)
Surat-395007, Gujarat, India

Registration and General Information

The program will be organized through google meet. Applications for the participation in the 'course' should fill in the Google Form by using the following link. The participants are required to send the application form, ID card and Payment details to the following email.

<https://forms.gle/HEYUYrTJvdBLxHh79>

Instructions to fill the Google form

- In google form all fields are mandatory.
- Participants have to attach the scanned copies of the Filled Registration Form, Payment Details, and Institute ID card.
- Alternatively, the participants can send the application on the following email id as well

pecdsttp@gmail.com

The last date of registration is

25th September 2020.

The candidates would be informed of their selection through E-mail by

28th September 2020.

The participants should attend all the sessions.

Address for any Communications

Dr. Mahmadasraf Mulla
Dr. K. V. Praveen Kumar
Dr. J. Venkataramanaiah

Organizing Committee
Department of Electrical Engineering
S. V. National Institute of Technology,
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and
Mobile: 9160919516, 9347864445

Course Fee

Students: Degree/PG/Ph.D : 750 /-
Academicians/Scientists/Researchers: 1200/-
Delegates from Industries : 1500/-

The non-refundable registration fee should be sent through **Net-banking/Online Payment.**

Bank Account Name : Director, SVNIT-CCE
SBI Account No. : 37030749143
Bank Name : State Bank of India
IFSC Code : SBIN0003320
Branch : SVRCET Branch,
Ichchhanath, Surat,
Gujarat, 395007.

While paying through the net-banking, in remarks the purpose is to be written as “**PECD Registration Form**”.

(Kindly save the receipt or take screenshot of the payment)

Who can apply

- Research Scholars
- Teachers of Engineering Colleges
- Practicing Engineers from industries
- PG/UG students

Patron

- Prof. S. R. Gandhi, Director, SVNIT, Surat.

Organizing Committee

- All faculty members of EED, SVNIT, Surat.

Resource Persons

- Academicians from IITs/NITs and other Professionals

Other Instructions

- This STTP will be conducted through Google Meet platform, so the participants should be equipped with the necessary infrastructure.
- In case of any query, feel free to contact the course coordinators.
- Google meet link will be shared to participants prior to the session starts.
- The certificates will be issued based on their attendance in the technical sessions

Registration Form

One Week Short Term Training Program (STTP)

On

Power Electronic Converters and Drives: Fundamentals, Implementation and Applications (PECD)

03rd October 2020 to 07th October 2020

Full Name:

Designation:

Department & Institution with Address:

Male/Female:

Mobile:

Open/OBC/SC/ST:

E-mail (Gmail):

Date of Birth:

Academic Qualifications:

Experience (Years):

Teaching:

Research:

Industry:

I declare that the details furnished above are correct to the best of my knowledge and belief. I also undertake to abide by the rules and other conditions prescribed by SVNIT, Surat.

Signature of the Applicant