

## REGISTRATION FORM

Short Term Course On

# Microcontroller based Power Electronics System Implementation (MPESI-2017)

14 – 18 August, 2017

Electrical Engineering Department, SVNIT, Surat

1. Name Dr/Mr/Ms: \_\_\_\_\_

2. Qualification: \_\_\_\_\_

3. Designation: \_\_\_\_\_

4. Department: \_\_\_\_\_

5. Experience: \_\_\_\_\_

6. Institutional Address: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

7. E-mail (for notification of acceptance): \_\_\_\_\_

8. Mobile No.: \_\_\_\_\_

9. Details of Fee Amount: DD No. and Date: \_\_\_\_\_

10. Accommodation required: YES / NO

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 S. V. National Institute of Technology, Surat.

Place: \_\_\_\_\_  
Date: \_\_\_\_\_ Signature \_\_\_\_\_

### Sponsorship Certificate

Dr/Mr/Ms \_\_\_\_\_ of the Department of \_\_\_\_\_ is sponsored to attend this programme and is permitted to attend the same during the aforesaid period.

Place: \_\_\_\_\_ Signature with name \_\_\_\_\_  
Date: \_\_\_\_\_ Sponsor /Head of the Department with SEAL

### Who can apply?

- Research Scholars
- Teachers of engineering colleges
- Practicing engineers

### Participation Fee Structure

- Practicing engineers/Professionals: Rs. 5000/-
- Academicians/Scientist/Researchers: Rs. 3000/-
- Students (UG/PG/Ph.D.): Rs. 1000/-

Payment should be made through A/C payee DD only, drawn in favour of “**Director, SVNIT**” payable at ‘**Surat**’.

### How to apply?

Application in the attached form duly recommended/sponsored by the concerned authority along with the DD of registration amount should be send to coordinator. In view of laboratory work maximum **THIRTY** participants on first cum first basis will be accommodated.

### Important Dates

- Last date of Registration: **15<sup>th</sup> July, 2017**
- Notification Confirmation: **17<sup>th</sup> July, 2017**

### Accommodation

Accommodation to the **outside** participants will be provided **on request**, made well in advance **at an additional cost**.

### Patron

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

### Organizing Committee

All faculty members of EED, SVNIT Surat.

### Coordinator and Contact Address

**Dr. M. A. Mulla (mam@eed.svnit.ac.in) and  
Dr. R. Chudamani (rc@eed.svnit.ac.in)**

DEPARTMENT OF ELECTRICAL ENGINEERING  
S. V. NATIONAL INSTITUTE OF TECHNOLOGY  
Ichchhanath, Surat-395 007, GUJARAT.  
Phone: 0261-2201566

NaMPET @SVNIT Surat

## Call for Participation

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on

# Microcontroller based Power Electronics System Implementation (MPESI-2017)

14 – 18 August, 2017

Organized by



DEPARTMENT OF ELECTRICAL ENGINEERING  
S. V. NATIONAL INSTITUTE OF TECHNOLOGY  
Ichchhanath, Surat-395 007, GUJARAT

Under the aegis of



**NaMPET Phase II**  
National Mission on  
Power Electronics Technology  
*Towards Power Electronics  
Excellence*

An Initiative of



Ministry of Electronics  
and Information  
Technology, (MeitY)  
New Delhi

Nodal Centre



Center for  
Development of  
Advanced Computing,  
Trivandrum

## About NaMPET

National Mission on Power Electronics Technology (NaMPET) is a national mission programme launched by the Ministry of Electronics and Information Technology (MeitY), Govt. of India, with a vision to provide the country with the capability to become a dominant player in Power Electronics Technology. Through this National level R&D Programme, Research, Development, Deployment and Commercialization of Power Electronics Technology is envisaged by enhancing the indigenous R&D expertise and infrastructure in the country with active participation from academic institutions and industries.

Centre for Development of Advanced Computing (CDAC), Thiruvananthapuram, a premier R&D organization under MeitY, is the Nodal Centre coordinating the activities of NaMPET. The first phase of the programme was successfully completed in 2010 and the activities under NaMPET Phase I focused on R&D, infrastructure and awareness creation. Considering the impact, created by the activities under the first phase of NaMPET, MeitY initiated the second phase of NaMPET (**NaMPET Phase-II**) in January 2012 aiming further strengthening of power electronics technology base in the country.

## About CDAC

CDAC undertakes application oriented research, design and development in electronics, so as to generate state-of-the-art producible, marketable, field maintainable products and systems. The Power Electronics group has wide experience of developing successful power electronics products/systems, and a very good industry interaction by way of transfer of technology, field implementation etc. It has very close association with leading academic institutions like IISc, IITs,

NITs etc. CDAC has contributed significantly to the growth of industry through indigenous development of commercially viable products and systems, foreign technology absorption, consultancy, training and turnkey implementation of contract projects.

## About SVNIT

The institute was established as Sardar Vallabhbhai Regional College of Engineering & Technology in 1961 at Surat in State of Gujarat and was upgraded by Government of India as a National Institute of Technology on 4th October, 2002. The institute is celebrating its Golden Jubilee Year in 2011-2012. The Institute offers seven under graduate, 18 post graduate and doctoral research programs of very high standard in various disciplines of engineering and applied sciences. 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 Under Graduate course in Electrical Engineering and Post Graduate programs in Power Electronics & Electrical Drives and Power System. The department offers Ph.D. programme to promote basic research activities in the various areas of Electrical Engineering. The consultancy and testing services are also rendered by the department.

## Course Objective

Increased concern of energy efficient power conversion has led tremendous growth of power electronics based energy conversion in last two decades. Digital controllers are the main backbone of power electronics system control. The reliability and efficiency of power electronics system is greatly contributed by its controller designing. In recent time system-on-chip solutions based on ARM processors become more popular in power electronics system implementation.

The proposed course is organized with an aim to discuss advancement and implementation aspects of

- New power electronics converters
- Electrical drives
- Power electronics application to power system, and
- Power electronic control of renewable energy sources

The course will be supported by laboratory experiments and hands-on exercises of different power electronics systems. Control circuit implementation using ARM Cortex-M4, 32-bit microcontroller (STM32F407xx) will be taught.

The course will bridge the gap between academic outcome and industry requirement. The course will be beneficial to the researcher and faculty members in developing research project prototype, conducting practical courses, guiding projects and for research.

## Resource Persons

Academician from IITs, NITs, CDAC and professionals from industries