

About VNIT, Nagpur:

Visvesvaraya National Institute of Technology, Nagpur is one of the thirty National Institutes of Technology in the country. It was established as Regional Engineering College in 1960. The Govt. of India conferred on the Institute, the Deemed to be University status with effect from 26th June 2002. Subsequently, the Central Govt. by National Institutes of Technology Act, 2007 (29 of 2007) declared VNIT Nagpur as an Institute of National Importance along with all other NITs. The Act was brought into force from 15th August 2007. It is located in the heart of Nagpur city on sprawling campus of 214 acres. It is recognized as pace setting institute for other educational institutions in the region. The institute offers 9 UG and 21 PG courses apart from Ph D programs in the area of Engineering, Architecture and Science. The distance of the campus from air port, railway station and bus stand is approximately 7/7/8 Km respectively.

About SATI, Vidisha:

Samrat Ashok Technological Institute (SATI) is a Grant-in-Aid Autonomous college in Vidisha, in the central Indian state of Madhya Pradesh. It was established by Late Maharaja Jiwajirao Scindia on 1 November 1960, with a donation from Gangajali Trust fund. It is an autonomous institute, which is fully funded by Government of Madhya Pradesh and managed by the Maharaja Jiwaji Rao Education Society chaired by Hon'ble Shrimant Jyotiraditya Madhavrao Scindia. The institute started with B.E. in Civil_Engineering, Mechanical_Engineering & Electrical Engineering. The institute now offers nine full-time and six Part-time undergraduate courses leading to the degree in Bachelor of Engineering and sixteen Postgraduate courses in the areas of Engineering, Science and Management. The college campus is spread over an area of 85 acres of lush green land with natural surroundings.

About Electrical Engineering Department, VNIT, Nagpur:

The department was established in 1960 with a UG programme in Electrical Engineering. The postgraduate programme in 'Integrated Power System' was started in 1968. Later, another postgraduate program in 'Power Electronics and Drives' was introduced in 2010. The Department is recognized as QIP Centre for M. Tech and Ph. D. programs. Faculty members of the department carry out research work in the area of power electronics and drives, renewable energy systems, power quality, power systems, control system etc.

For More Information, Contact:

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Prof. (Mrs.) M. A. Chaudhari, HoD, EED Dept.



Faculty Development Program

on

Digital Control of Power Electronic Converter for Drives & Energy System

(July 15 to 19, 2019)

Sponsored by TEQIP-III
under
Twinning Program

Course Coordinators

Dr. Pradyumn Chaturvedi
Prof (Mrs) M. A. Chaudhari
Prof. S. P. Phulambrikar

Organized by

Department of Electrical Engineering
Visvesvaraya National Institute of
Technology, Nagpur, India-440010
&
Department of Electrical Engineering
Samrat Ashok Technological Institute,
Vidisha, M.P., India-464001

Course Overview:

The aim of the FDP is to teach basic understanding of power electronics converter design for drives and renewable energy system. Converter topologies and their control techniques will be explained thoroughly. Sufficient laboratory sessions will be conducted on FPGA based implementation of power electronic converters. It makes the learners to know how to use system generator tools and model the system generator tool for electrical applications through hands-on training. Thus, the participants will be able to develop their custom model which can be simulated and interfaced with FPGA, for hardware implementation. Apart from it few sessions will also be on implementation of digital control of power electronic converter using DSP/Microcontrollers.

Course Content:

- Space Vector PWM based open end winding machine drive control with two level and multilevel inverter.
- Real time digital control - hardware and software architecture,
- Power hardware in the loop emulators - System architecture and electrical machine emulation.
- FPGA based design and implementation of power electronic converters
- FPGA programming and Matlab interfacing
- Nearly 45% course content is based on Hands on Lab Sessions with FPGA.

Who Can Participate?

- Electrical Engineer or research scientist interested in designing digital control of power electronics converter using FPGA/DSP.
- Industrial professional working on power electronics, drives and renewable energy

system and wish to share and learn in the area.

- Student or faculty from academic institution interested in learning how to do research on power electronics and renewable energy system, and to know current research trends in the area.

Faculty for the Course:

Experts from IITs, NITs, IIST and industries will deliver theory and practical sessions during the course.

Registration Fee:

There will be no registration fees for FDP.

How to Register:

Fill, get signed, scan and e-mail the Registration Form at pc220774@gmail.com before last date.

Accommodation:

The participants have to make their own arrangement for accommodation and other lodging boarding facility. However few seats are available for participants in guest house and hostel on first cum first serve basis at their own cost.

Note: Maximum number of participants is limited to 30 only. Selection will be made on first-cum-first-serve basis.

Last date for registration: 12 July 2019
(request for accommodation will be entertained only till 11 July 2019)



**Faculty Development Program on
Digital Control of Power Electronic Converter
for Drives & Energy System**
(July 15 to 19, 2019)
**Venue: Electrical Engineering Department,
VNIT, Nagpur, M.S., India**

REGISTRATION FORM

Name:

Designation:

Institute:

Address for Correspondence:
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Mob. No:

Email:

Signature of Applicant

Seal & Signature of
Sponsoring Authority

