

## About the Program

The main motto of the Short Term Training Program (STTP) on **"REAL-TIME SIMULATION & APPLICATIONS IN POWER ELECTRONICS, DRIVES AND RENEWABLE ENERGY SYSTEMS (RTSA)"** is to provide the platform for the upcoming researchers who are willing to work in the areas of power electronics, drives, and renewable energy sources.

Power electronics is interdisciplinary in nature and is used in a wide variety of area of Electric Drives, Power Quality in Power Systems and Renewable Energy systems etc. This STTP is designed to address applications of power electronics in the industry and to encourage various zonal professionals /students/ academicians towards research and for their Academic Quality Improvement too. This course will offer a unique opportunity to all the participants in the relevant topics in Real time systems and its applications through theoretical sessions and laboratory-based experiments/demonstrations.

Professionals from academic institutes, R&D labs, user agencies like steel, railways, defense etc., and manufacturing industries in the country are welcome to participate in this STTP.

## About the Institute

National Institute of Technology Kurukshetra, Haryana is a premier Technical Institute of the region. The institute started working as Regional Engineering College, Kurukshetra in 1963. This Institute was conferred upon status of Deemed University on June 26, 2002. Since then it has been renamed as National Institute of Technology Kurukshetra. Various disciplines of Engineering and Technology at the Undergraduate and

Postgraduate level, the Institute offers excellent facilities for advanced research in the emerging areas of Science and Technology.

## 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 programmes. 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 UG course in Electrical Engineering and PG programmes in Power Electronics & Drives, Power System and Control Systems. 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.

## How to reach the institute

Kurukshetra, steeped in history and mythology, is a place of great spiritual significance, where Lord Krishna, delivered the divine message of "Shrimad Bhagwad Gita". It is one of the premier centre of pilgrimage attracting devotees in a steady stream all-round the year. Kurukshetra is a railway junction on the Delhi-Karnal-Ambala section of the Northern Railway. Also, Kurukshetra is well connected by NH1 which connects Delhi-Chandigarh-Amritsar-Jammu. It is about 160 km from Delhi, 80 Km from Chandigarh and 35 km from Ambala. The NIT Campus is about 10 km from Pipli junction on NH1 and about 4 km from Kurukshetra railway station.

## **One Week Short Term Training Program (STTP) on REAL-TIME SIMULATION & APPLICATIONS IN POWER ELECTRONICS, DRIVES AND RENEWABLE ENERGY SYSTEMS (RTSA)**

**Scheduled during**

**18<sup>th</sup> – 23<sup>rd</sup> December 2017**

**Chief Patron**

Padmashri Dr. Satish Kumar, Director,  
NIT kurukshetra

**Patron**

Prof. Ratna Dahiya, HOD, EED,  
NIT kurukshetra

**Coordinators**

**Dr. TEJAVATHU RAMESH**

**Prof. AEIDAPU MAHESH**

Assistant Professors, EED  
NIT Kurukshetra



**Organized by**

**Department of Electrical Engineering  
National Institute of Technology Kurukshetra  
Kurukshetra, Haryana-136119, India.**

## Who can apply?

- Faculty members/ Academicians.
- Industrial Professionals/ Delegates.
- Research Scholars.
- UG/PG Engineering students.

## STTP Fee

<i>Students/ Research scholars</i>	: 600/-
<i>Faculty Members/ Academicians</i>	: 1500/-
<i>Industrial Professionals/ Delegates</i>	: 2000/-

## Online Payment:

Goto to Google > SBI Collect > Proceed next > Click on State of Corporate/Institution > Select Haryana > Click on Type of Corporate/Institution > Select Educational Institution > Go > Select Educational Institutions Name > DIRECTOR NATIONAL INSTITUTE OF TECH. KURUKSHETRA > Submit > Select Payment Category > **Registration FEE RTSA 2017** > Pay Registration FEE. The online application may send to E-mail ID along with the online payment reference number details.

## OFF-LINE Payment:

The D.D. drawn in favor of "The Director, NIT Kurukshetra" payable at 'Kurukshetra', should be sent along with the completely filled STTP registration form.

## Registration and General Information

Applications as in the attached format along with the D.D. should reach through post as given in "Address for Communication".

*Last date of reaching : 29<sup>th</sup> November 2017 application*

*Candidates informed of their : 30<sup>th</sup> November 2017 selection*

## Accommodation

Suitably accommodation will be made available, if requested in advance, in the hostels/guest houses of the NIT campus on nominal payment basis for out stationed candidates on single/ twin sharing basis depending on availability.

## Tentative Speakers

NIT Kurukshetra faculty, faculty from various IITs and NITs will deliver the lectures and handle the hands-on sessions.

## STTP-RTSA Tentative Contents

- **Variable speed control of IM drive.**
- **Sensorless Induction Motor Drive Systems.**
- **Interfacing multi-level inverter with dSPACE and OPAL-RT.**
- **Renewable Energy Systems.**
- **MPPT of PV System.**
- **Optimization techniques**
- **Power Quality issues.**
- **Role of High Power Factor Converters in Renewable Energy Systems.**
- **Hands-on sessions on the OPAL-RT simulator.**
- **Hands-on sessions on dSPACE simulator.**
- **Hands-on sessions on the multi-level inverter.**

## Address for Communication

Dr. Tejavathu Ramesh & Prof. Aeidapu Mahesh  
Assistant Professor,  
Coordinators (STTP-RTSA-2017),  
Department of Electrical Engineering,  
NIT Kurukshetra, Kurukshetra - 136119,  
Haryana - INDIA.  
E-mail : [tramesh.ee@nitkr.ac.in](mailto:tramesh.ee@nitkr.ac.in)  
Mobile: +919034003377 / 9034799994



## **One week Short Term Training Program (STTP) on**

### **REAL-TIME SIMULATION & APPLICATIONS IN POWER ELECTRONICS, DRIVES AND RENEWABLE ENERGY SYSTEMS (RTSA)**

## **Registration Form**

Name : \_\_\_\_\_  
Gender : \_\_\_\_\_ DOB : \_\_\_\_\_  
Age : \_\_\_\_\_ Qualification : \_\_\_\_\_  
Experience : In Industry : \_\_\_\_\_  
In Academics : \_\_\_\_\_

Present Designation : \_\_\_\_\_  
Present Organization & Address : \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Mobile No. : \_\_\_\_\_  
Email : \_\_\_\_\_  
Accommodation required : Yes / No  
Have you been sponsored for this STTP? : Yes / No

If yes, Address of Sponsoring Authority: \_\_\_\_\_  
\_\_\_\_\_

## **Payment Details :**

DD /Ref. No. : \_\_\_\_\_ Dated : \_\_\_\_\_  
Bank Name : \_\_\_\_\_ Amount : \_\_\_\_\_

Signature of the applicant with date : \_\_\_\_\_

## **Approval from present employer/ organization of applicant:**

The applicant will be permitted to participate in the above program if selected.

**Signature** and the **Seal** of Head of the Institution/Department/Section