

KURUKSHETRA

Kurukshetra is popularly known for its historical and religious importance. Here, the battle of Mahabharata was fought, and Lord Shree Krishna delivered the divine message as enshrined in the holy book "Shrimad Bhagwad Gita". It is also known as DHARAMKSHETRA and it attracts devotees from all corners of world all round the year. Kurukshetra is very well connected by Rail (Delhi-Ambala section), by Road (NH1, connecting Delhi-Chandigarh-Amritsar-Jammu) and by Air (Delhi-160 km and Chandigarh-80km). The NIT Kurukshetra campus is situated about 10 km from Pipli, Bus stand located on NH1 and about 4 km from Kurukshetra railway station.

NATIONAL INSTITUTE OF TECHNOLOGY KURUKSHETRA

NIT Kurukshetra, formerly known as Regional Engineering College, Kurukshetra was founded in 1963. It was conferred upon the NIT status, with Deemed University on June 26, 2002. The Institute offers several courses, in various disciplines of B.Tech., M.Tech., MBA, MCA and Ph.D. with an annual intake of about 1500 students. Institute also provides excellent facilities for advanced research in the emerging areas of Engineering, Science, and Technology. The institute has well qualified and dedicated faculty along with supporting staff, laboratories and other infrastructure. The infrastructure is geared to enable the institute to produce technical personnel of high quality.

DEPARTMENT OF ELECTRICAL ENGINEERING, NIT KURUKSHETRA

The department offers B.Tech, M.Tech and Ph.D. Degrees. The B.Tech. course in Electrical Engineering is run with a number of electives, which enables the students to specialize in one of the fields i.e. Power Apparatus and Systems; Electronics and Instrumentation; Computer Applications; Information and Control. Presently, the department has three post graduate programs, M.Tech., in Control Systems; Power Systems; Power Electronics and Drives, and offers Ph.D. in different areas to keep synergy with the evolving innovations and developments in all disciplines of Electrical Engineering.

PATRON

Prof. B. V. Ramana Reddy
Director, NIT Kurukshetra

CONVENERS

Dr. Ashwani Kumar,
Professor and Head, EE Department
Dr. J. S. Lather, Prof. EE Department
Dr. Yash Pal, Prof. EE Department

COURSE COORDINATORS

Dr. Anil Kumar Dahiya, Assoc. Prof.
Dr. Muralidhar Killi, A.P.
Dr. Rajan Kumar, A.P.
EED, NIT Kurukshetra

IMPORTANT DATES

- Last date for Registration: **11th May, 2023**
- Confirmation to the participants (on website or by email): **12th May, 2023**

Address for Correspondence:

Course Coordinators

Room No. E-318 Electrical Engineering
Department, NIT Kurukshetra – 136119,
Haryana, India

Email: muralidhar.killi@nitkkr.ac.in

rajan@nitkkr.ac.in

Phone: +91-9778463355, +91-8882745466



Online/Hybrid Short-Term Course On

Green and Sustainable Energy: Generation and Management (GSEGM-2023)

(15th - 19th May 2023)



Organized by

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

COURSE OBJECTIVES

Energy efficiency is of dominant importance nowadays due to increasing electrical energy demand, increasing awareness of global warming & increase in prices of fossil fuels. Bridging this gap from the supply side is a very difficult and expensive proposition. Green and sustainable energy play an important role in bridging this gap with its rapid development. However, due to the uncertainty of renewable energy sources in the power network, operation and management become challenging. The conventional methods cannot handle a wide range of uncertainties during the operation of such systems. The suitable power flow management thus becomes mandatory for the safe and reliable operation of the network-integrated with sustainable energy systems.

The primary aim of this e-STC is to impart research skills to the beginners, and to improve the quality of research among the existing researchers in the thematic areas of renewable energy and its management. This programme will bring a positive transformation among the faculty members, research scholars and participants from industries towards research work, and enable the participants to develop competence in understanding recent advances in proposed topic of the course. The participants will gain the knowledge of recent and future trends in renewable energy utilization.

COURSE CONTENTS

The course aims to address the following topics related to the emerging research and challenges in generation and management of green and sustainable energy:

- Power flow management in solar PV-wind-battery based hybrid generation
- Industrial challenges in green energy generation
- Smart grid architecture
- AC/DC Micro grids
- Renewable energy sources-challenges and solutions
- Energy saving and e-transportation
- Control techniques for RES
- Economic dispatching of utility grids with RES
- Protection aspects of RES-based generation
- Standalone solar PV-based battery charging
- Motor Drives for solar PV-based water pumping
- Future trends in green energy

RESOURCE PERSONS

Eminent experts from premier Institutions like IITs, NITs and universities across the globe, and from Industries.

WHO SHOULD ATTEND?

Faculty members/ research scholars/ students from academic institutes approved by the AICTE/ UGC/ MHRD and Scientists/ Engineers working in Private/ Public/ Govt. organizations/ industries etc. can attend the course. The application should be made on the registration form and should accompany registration fee as below:

Participant's category	Registration fee*
Students/ Research Scholars	Rs. 300/- online Rs. 500/- offline
Faculty	Rs. 500/- online Rs. 700/- offline
Industry/ R&D / Govt. Organization	Rs. 1000/-

*** Registration fee is non-refundable**

Registration fee is to be paid through SBI Collect. Please write the name of e-STC (GSEGM) in remarks during online SBI Collect payment and save a copy of the payment receipt.

The brochure with registration form is available in the institute website www.nitkkr.ac.in.

The participants need to upload (i) Payment receipt (receipt of SBI collect payment) and (ii) Signed copy of registration form through the link:

<https://forms.gle/ULe3uGpndqaF1zZD7>

The registration form, complete in all respects, accompanied by the details of requisite amount should reach on or before 11th May, 2023.

REGISTRATION FORM

**Online/Hybrid Short-Term Course on
“Green and Sustainable Energy:
Generation and Management (GSEGM)”
(15th –19th May 2023)**

Title: (Dr./Mr./Mrs./Ms.) :

Name (in BLOCK LETTER) :

Sex (M/F) :

Date of Birth: (dd/mm/yyyy):

Designation :

Organization :

Address for correspondence:

Phone :

E-mail :

Qualification :

**Category (Please Tick) : Students/ Faculty/ Industry/
R&D / Govt. Organization**

Payment Details

Transaction ID/

Reference ID:

Date of Payment:

Amount :

Attachment(s) Fee Payment Receipt

Signature of applicant (with date):

**Signature of Head of the Department/Head of
the Institution of the Applicant**