The National Institute of Technology Tiruchirappalli (NIT-T), formerly known as Regional Engineering College, Tiruchirappalli (REC-T) is one of the technical institutes started by the Government of India. REC-T was imparting quality education since its inception. In 2003, the institute has been granted “Deemed to be University” status with the approval of UGC/ AICTE. The college has been conferred with autonomy in financial and administrative matters to achieve rapid development. NIT-T was registered under Societies Registration Act XXVII of 1975. The College has a total campus area of 800 acres. With the cream of engineering and management talent, encompassing exuberant students and inspiring faculty, integrated with state-of-the-art infrastructure facilities, NIT-T today has emerged as one of the premier institutions in the country.

### About EEE department

The department of Electrical and Electronics Engineering, National Institute of Technology Tiruchirappalli offers an undergraduate program, post-graduate programs (power systems and power electronics) and research degrees (M.S and Ph.D.) in various fields of Electrical Engineering. The department is recognized for excellence in teaching, research and service to the profession. The department has very well-established laboratories with sophisticated equipment supplementing the academic and research needs of students and research scholars.

### Coordinators

- Dr. Josephine. R. L, EEE, NITT
- Dr. S. Mageshwari, EEE, NITT
- Dr. S. Moorthi, EEE, NITT

### Resource persons

Faculty from various IITs/NITs with rich experience in teaching/research and experts from renewable energy sector will be handling the sessions.

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**A Five-Day Workshop on Renewable Energy Grid Integration - Challenges and Operational Strategies**

(18th - 22nd Jan, 2021)

(on Virtual Mode)

**Organized by**

*Department of Electrical and Electronics Engineering*

National Institute of Technology, Tiruchirappalli
To meet the growing demand and to reduce the pollution, renewable based power generation technologies are the main thrust area of research in all over the world. Efficient power Electronic converters and its control plays an important role in the power conversion process. The main challenges and control strategies associated with the grid integration of renewable energy sources are discussed in detail in the five-day workshop. The participants of this workshop are expected to gain knowledge on various control strategies of grid integration of renewable energy sources.

The course will enlighten the participants with new paradigms and findings, practical challenges encountered and the possible solutions for the challenges faced in grid integration. The workshop is anticipated to enhance the way for an overall fortification of technical capabilities of the power electronics and power system community.

The participants will be given a thorough understanding of the following topics:
- System integration of renewables
- Flexible renewable generation
- Demand response and storage
- Power electronics in renewable energy
- Power system operation in renewables
- Challenges and operational strategies

This course is for anyone with a solid background in electrical circuits, renewable energy sources, power electronics and power systems. UG/PG students from Electrical and Electronics Engineering, research scholars, faculty and industry personnel can attend this workshop.

**Who can attend**

For any further queries and clarifications, feel free to contact through mail ID nitteeeworkshop@gmail.com.

**Contact information**

**Objective of the Course**

- To meet the growing demand and to reduce pollution, renewable based power generation technologies are the main thrust area of research in all over the world.
- Efficient power Electronic converters and its control plays an important role in the power conversion process.
- The main challenges and control strategies associated with the grid integration of renewable energy sources are discussed in detail in the five-day workshop.
- The participants of this workshop are expected to gain knowledge on various control strategies of grid integration of renewable energy sources.

**Course Contents**

- System integration of renewables
- Flexible renewable generation
- Demand response and storage
- Power electronics in renewable energy
- Power system operation in renewables
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**Registration Fee**

<table>
<thead>
<tr>
<th>Category</th>
<th>Amount to be paid (INR)</th>
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<tbody>
<tr>
<td>Faculty/ Research scholar</td>
<td>Rs.2000/-</td>
</tr>
<tr>
<td>UG/PG students</td>
<td>Rs.1000/-</td>
</tr>
<tr>
<td>R&amp;D/Industry</td>
<td>Rs.5000/-</td>
</tr>
</tbody>
</table>

**Registration procedure**

1. Go to the SBI-collect using the link [https://www.onlinesbi.com/sbicollect/icollecthome.htm](https://www.onlinesbi.com/sbicollect/icollecthome.htm)
2. Select the state as ‘TamilNadu’, and category as ‘Educational Institutions’.
3. Select “conference and workshop NIT Trichy”.
4. Select payment category as “REGICOS”.
5. Make payment through UPI/ Net Banking/ Credit card/ NEFT.
6. Once the fees is paid, fill up your details and upload the payment receipt in – [https://forms.gle/MahXqj4TCePwTbK3A](https://forms.gle/MahXqj4TCePwTbK3A)

Upon successful completion of workshop, the FDP digital certificate will be given to the participants.

**Important Dates**

<table>
<thead>
<tr>
<th>Start date for registration</th>
<th>Last date for payment and registration</th>
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<tbody>
<tr>
<td>1st December 2020</td>
<td>10th January 2021</td>
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</tbody>
</table>

*Registration fee to be paid by using SBI-collect only

The payment for the registration includes GST and other taxes.