



மின் மற்றும் மின்னணுப் பொறியியல்
वैद्युतिका तथा कणकीय अभियांत्रिकी
ELECTRICAL AND ELECTRONICS ENGINEERING

ELECTRICAL AND ELECTRONICS ENGINEERING

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

NATIONAL INSTITUTE OF TECHNOLOGY
TIRUCHIRAPPALLI





VISION

To be a centre of excellence in Electrical Energy Systems.

MISSION

- Empowering students and professionals with state-of-art knowledge and Technological skills.
- Enabling Industries to adopt effective solutions in Energy areas through research and consultancy.
- Evolving appropriate sustainable technologies for rural needs

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

The department of Electrical and Electronics Engineering (EEE), NIT Tiruchirappalli was started in the year 1964. In addition to three academic programmes, the department offers research programmes (M.S. and Ph.D.) in Electrical and Electronics Engineering. Since its inception, the department has not only shown academic excellence, but also laid a strong foundation for the research community by establishing many research laboratories. The Department is globally recognized for excellence in research in the field of wind and solar electrical energy conversion systems. The EEE department at NIT Tiruchirappalli boasts a robust R&D profile, delving into advanced power systems, renewable energy, and smart grid technologies. With a focus on sustainable solutions, it pioneers research in electric vehicle technologies and grid integration, contributing significantly to the evolving energy landscape.

STARTED B.Tech. EEE	1964
STARTED M.Tech. (POWER SYSTEMS)	1971
STARTED Ph.D.	1973
FIRST Ph.D. PRODUCED IN THE DEPT.	1978
DEPARTMENT BECAME QIP CENTRE FOR Ph.D.	1986
STARTED M.S. (BY RESEARCH)	2006
STARTED M.Tech. (POWER ELECTRONICS)	2006

ACADEMIC PROGRAMMES

B.Tech.

The major objectives of the B.Tech. programme in Electrical and Electronics Engineering are to prepare students:

1. for graduate study in engineering
2. to work in research and development organizations
3. for employment in electrical power industries
4. to acquire job in electronic circuit design and fabrication industries
5. to work in IT and ITES industries

M.Tech. IN POWER SYSTEMS

The major objectives of the M.Tech. programme in Power Systems are to equip the students with adequate knowledge and skills in Power Systems Engineering and to prepare them for the following career options:

1. research programmes in Power Systems Engineering
2. employment in power research and development organisations
3. to work in electric power industries and energy sectors
4. faculty positions in reputed institutions

M.Tech. IN POWER ELECTRONICS

The major objectives of the M.Tech. programme in Power Electronics are to equip the students with adequate knowledge and skills in Power Electronics and to prepare them for the following career options:

1. research programmes in Power Electronics and related areas
2. employment in R & D organisations related to sustainable technologies
3. to work in power electronic circuit design and fabrication industries
4. faculty positions in reputed institutions

M.S. (BY RESEARCH) & Ph.D.

M.S. (by Research) and Ph.D. programs are offered in all engineering departments of the Institute. Specific areas (research topics) will be decided by the department based on the following:

- a. Research interests of the faculty.
- b. Research areas of mutual interest (considering NITT and sponsoring industries like BHEL, BSNL, ISRO, DRDO, CPRI, CDAC, Indian Railways, reputed private R&D organizations, etc.)
- c. Research areas of sponsored research projects.



DEPARTMENT LABORATORIES

RESEARCH LABORATORIES

- Control Systems Research Lab
- Hybrid Electrical Systems Lab
- Power Converters Research Lab (partly funded by NaMPET)
- Power Electronics Research Lab
- Power Systems and Smart Grid Lab
- Power System Automation and Control Research Lab
- Solar PV Energy Conversion Research Lab
- VLSI Systems Research Lab
- Switched Mode Power Converters Research Lab
- Electric Mobility Research Lab
- Industrial Automation Research Lab
- Nano and Micro Grid Lab
- Robotics Lab
- Siemens Lab
- Intelligent Systems and Networking Research Lab
- Centre for Intelligent Electrical System
- Electrical Drives Research Lab
- Power Quality and Energy Systems Lab
- Applied Power Electronics Research Lab
- Advanced Power Converters Research Lab

CURRICULUM LABORATORIES

- Computer Center
- Electronics Lab
- Machines Lab
- Power Electronics Lab
- Power Systems Lab

PLACEMENTS AND HIGHER STUDIES

- Over 100+ Companies offer placement opportunities
- 90+ students placed within 3 months into placement season
- Highest package secured is 52 LPA and average package is 19 LPA
- Over 25 students got admit in top QS ranked abroad universities in the last two years

EEE ASSOCIATION

The Electrical and Electronics Engineering Association, better known as EEE-A, is the brainchild of the Department of Electrical and Electronics Engineering. The EEE-A acts as a bridge between the students and the department. It offers a plethora of activities throughout the year that encourages students to gain in-depth understanding of the field. These include guest lectures, workshops, events and EEEA's annual technical symposium, Currents.



CURRENTS

TECHNICAL SYMPOSIUM OF THE EEE DEPARTMENT

Currents is the annual technical symposium of the EEE Association at NIT Trichy. Currents was first inceptioned in 1990s as a humble affair, by a group of enthusiastic members of the EEE Association. It has on offer, a plethora of innovative events, state-of-the-art workshops and the best guest lectures from the most revered academicians and industrialists, and its bi-annual magazine: Tronicals.



OUR MAJOR RECRUITERS