

## ABOUT THE DEPARTMENT

The Department of Electrical and Electronics Engineering offers NBA accredited B.E. degree program in Electrical and Electronics Engineering, M.E. degree program in Power Electronics and Drives and Ph.D research program. The department is recognized as an approved research centre by Anna University since 2006. The broad area of research includes Power Systems, Power Electronics & Drives, Special Electrical Machines, Control & Dynamics, Renewable Energy Systems, High Voltage Engineering and Optimization techniques. The department is equipped with state-of-the-art laboratories like Advanced Power Electronics lab, Solar Energy Research Lab, High Voltage Lab and System Simulation Lab with licensed software like MATLAB, MagNet, Labview, PSpice, PSIM, PSCAD, Mipower, EMTP and Ansys.

The department has excellent track records in both research publications and research grants from reputed organizations, and there are currently over 6 active externally funded research projects and completed already 12 projects from various granting agencies. In the past five years, the department has successfully produced more than twenty Ph.D candidates.

The department has signed MoU with M/s. Danfoss Industries, M/s. Hibrise Technologies and has taken up research projects funded by AICTE, MNRE and NIWE. The Department has organized six International Conferences, seven National Conferences, seven Faculty Development Program sponsored by Anna University, three Short-term Training Program sponsored by AICTE, ISTE and many numbers of Workshops.

## PROMINENT ALUMNI



**Mahesh**  
TVS Lucas, Chennai



**V.K. Vishwhak**  
Assistant Engineer,  
TNEB, Dharmapuri



**S. Nivedha**  
Engineer,  
Renault Nissan, Chennai



## SRI SIVASUBRAMANIYA NADAR COLLEGE OF ENGINEERING

(An Autonomous Institution affiliated to Anna University)

Rajiv Gandhi Salai, Kalvakkam - 603110



Department of Electrical and Electronics Engineering

## ME - POWER ELECTRONICS AND DRIVES

### ABOUT THE PROGRAMME

The department of EEE offers the ME degree program in Power Electronics and Drives since 2004, with a sanctioned intake of 18 candidates. The duration of the program is two years with the eligibility criteria as specified by Anna University. The competent authority of NBA has granted accreditation status to M.E. Power Electronics and Drives program for a period of 5 years. The institution is privileged to have autonomous status granted by UGC.

### FOR ADMISSIONS CONTACT

**SSN TRUST OFFICE**  
New No. 19, Old No. 8,  
3rd Main Road,  
(Opp. HDFC Bank)Kasturba Nagar,  
Adyar. Chennai – 600020  
Email : [admissions@ssn.edu.in](mailto:admissions@ssn.edu.in)  
Phone : 044 – 2441 1656 / 2441 6474

**SSN COLLEGE OF ENGINEERING**  
Rajiv Gandhi Salai (OMR)  
Kalavakkam – 603 110  
Tamil Nadu, India  
Phone: +91 44 27469700  
Email: [info@ssn.edu.in](mailto:info@ssn.edu.in)



## RESEARCH GOALS AND ACHIEVEMENTS

The programme ME (Power Electronics and Drives) offered by EEE department has established a good reputation in the field of power electronics, machines, with prominence in renewable energy and Electric Vehicle technology. Significant research arenas in power electronics include static power conversion, application of power electronics to improve the performance of power systems, renewable resources interface; magnetic, battery and flywheel energy storages and use of artificial intelligence and IoT in power electronics. Electric machines and drives comprise the aspects related to machine design and control, which includes electromagnetic 2D and 3D based design and analysis of electric motors, especially Switched Reluctance Motor, BLDC, Synchronous Reluctance drives for various industrial applications and intelligent motion control of electric drives.

Our objectives are to perform collaborative research with industry and to improve student outcome through teaching, research, development and training in the emerging technologies. The department is a recognized Research Centre of Anna University. The department consists of 27 academic faculty members along with 65 research scholars pursuing their PhD with a total research funding of more than Rs.1 Crore in the last two years. The faculty and students have published over 120 Journal papers in the last two years. All ME(PED) students participate in the research activity through their Internally Funded Project scheme and publish papers in refereed journals/conferences. The students are provided with ample opportunities for the training program of reputed industries, professional societies, research organizations and academic universities. The Institution is strategically located in the hub of electrical and automobile industries, that will bring more opportunities to the ME(PED) students.

## FACILITIES

State of the art lab equipments, Switched Reluctance Motors; Brushless DC Motor; Synchronous Reluctance Drives; DSP-TMS320LF2407 Kits; Xilinx; Spartan 3A DSP Kits; Agilent Oscilloscope with excellent computing facilities with fully licensed softwares like ETAB, PSCAD, PSIM, MagNet, ANSYS to support the research and academic activities.

## VALUE ADDED LABORATORIES



## VALUE ADDED LABORATORIES (Cont...)



## FUNDED PROJECTS



## INDUSTRY LINKAGES



ePropelled - ePropelled is a UK based leading expert in magnetic engineering innovations that dramatically improve electric motor and generator efficiency for propulsion systems in many industries. ePropelled will work with the Incubation Centre at Sri Sivasubramaniya Nadar (SSN) College of Engineering, an affiliate of Anna University, where its offices and test labs will be based. The company will work closely with SSN's Electrical Engineering Department, whose members have considerable experience with EVs, to develop, test and validate product design.

Danfoss - Danfoss is in the business of mechanical and power electronic components and solutions. SSNCE has signed MoU with Danfoss industries Pvt Ltd. to work towards Research Placement and Training. Danfoss Industries Pvt Ltd offers Internship in their company and during the period of internship a stipend of Rs.13,000/- paid



Lucas TVS - Lucas TVS regularly offers students paid internship trainee and placement opportunities in their Company.

Euro Process Automatik - SSNCE has signed a MoU with Euro Process Automatik, channel partner of ABB, for a collaborative project under DST-IRR scheme.

