

Student Activities

To achieve all round development of students, Electrical Engineering Students' Association (EESA) has been formed and it works under the guidance of active faculty members. The Association has been organizing every year a national level technical symposium namely "Vidhyut Adbhutam", in which attracts participation from across the country for robotic competitions, paper presentation, poster presentation, model-making, quiz, workshops, expert lectures etc. Students are also motivated to take part in various extra curricular and extra mural activities.

Placement

Industry Institute Interaction Cell braces the support to students for getting ahead in technical career by providing them jobs in desired field. The department maintains close ties with Industries and Research Organizations. Students are motivated by exposing them to industry environment through various modes such as lectures by experts from industry, industrial visits, and industry based projects on a regular basis. This is to supplement their classroom learning. The placement of students of Electrical Engineering Programme is almost 100 % in core as well as other companies and the average salary package remains fairly good in the competitive market. Some of the industries/R&D organizations where students are placed are: Infosys, TCS, L&T, IOC, Cognizant, Essar, Syntel, Tata Power, Secure Meters, TCEL, Torrent Power, Motorola, Siemens, Mahindra & Mahindra, Atul Ltd., ABB, GNFC etc.

Achievements Of Department

B.Tech (Electrical) program was accredited by National Board of Accreditation, New Delhi and was awarded 'A' grade. One of the faculty member has bagged the Young Engineer Award from the Indian National Academy of Engineering (INAE) in the year 2008. Faculties of the branch have also succeeded in publishing a number of international publications. Also the branch has been successfully organizing the technical event like "VIDHYUT ADBHUTAM" since the last three years. The combined efforts of the students and teachers of the branch have led to the grand success of "ROBOCON", a national level intercollegiate robotic competition.



About Nirma University

Nirma University, Ahmedabad was established in the year 2003 as a statutory university under the Gujarat State Act at the initiative of the Nirma Education & Research Foundation (NERF). The foundation was established by the well-known industrialist and philanthropist Dr. Karsanbhai K. Patel (Chairman, Nirma Ltd.) in 1994 with the objective of imparting the best in education and builds a strong foundation for the future generations of India. The visionary, Dr. Karsanbhai K. Patel Chairman, Nirma Group of companies is the Chairman of NERF & President of the University, which is established, in a 110 acre campus. Six leading institutions within the span of 14 years:

Institute of Technology

Institute of Management

Institute of Diploma Studies

Institute of Pharmacy

Institute of Science

Institute of Law

The establishment of Nirma University in April 2003 was a natural consequence of the high standards achieved by these Institutions. The University Grants Commission (UGC) has now included Nirma University in the list of recognized Universities Under Section2(f) of the UGC Act. Innovation, Excellence and Quality are the key driving forces at the campus.

About Institute of Technology

Institute of Technology is a leading institute offers multi disciplinary undergraduate, post graduate and Ph.D. programmes in engineering.

The academic ambience provides full scope for group activities, which helps individual to develop their integrated personality.

The institute has distinguished record of achievements. The academic environment generated by the interaction between professional disciplines has a stimulating influence, especially in the formative years of students.

The dedication and commitment with which the students and faculty have worked over more than a decade have paid rich dividends and this has made this institute the most preferred one among the student fraternity.

Keeping in view the aims and objectives of the Institute of Technology, the library has been planned and is being developed by a team of qualified professional library staff.

The library aims to facilitate learning, teaching, research, training and consultancy activities at the Institute. The library resource center is fully automated. The center has adopted latest information technologies like CD, DVD, Multimedia Kits, Bar-code Scanners, Text and Graphic Scanners. More than 1200 desktop computers have been provided to hostel rooms. Library is enriched with various facilities like reading facilities, reference, photocopying, circulation, video viewing, computerized information search, library orientation programme, newspaper clipping, current awareness services, inter-library loan DELNET, ADINET, New Arrival List, CAS and SDI services. The Library Resource Center provides book bank facility to the students of Institute of Technology. The main purpose of this service is to help the needy meritorious students.



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About The Department

With an affiliation to Gujarat University, Nirma Institute of Technology started Electrical Engineering Department in 1995. Today Department of Electrical Engineering ardently runs U.G. and P.G. programmes in EE, EC and IC under the Umbrella of Nirma University. The department is enriched with latest and well planned laboratories, equipments, software packages and many more facilities to augment quality of teaching learning process.

Our Vision

Shaping a better future for mankind by developing effective and socially responsible individuals and organizations.

Our Mission

Institute of Technology emphasizes all-round development of its students. It aims at not only producing good professionals, but also good and worthy citizens of a great country, aiding in its overall progress and development.

It endeavours to treat every student as an individual, to recognize their potential and to ensure that they receive the best preparation and training for achieving their career ambitions and life goals.

Programmes Offered

As one of the strongest wings of Electrical Engineering Department, Electrical Engineering division splendidly runs the following programmes:

- B.Tech. in Electrical Engineering
- B.Tech. (Part Time) in Electrical Engineering
- M.Tech. in Electrical Engineering (Power Electronics, Machines & Drives)

Course structure of each of these programmes is designed to impart the best to the students, and the curriculum is reviewed twice in a year by the experts from Industries, Academia and R&D Organizations and it is updated in consultation with them. Electrical Engineering Programme also intends to start the course of M.Tech. in Power System Engineering in near future. Electrical Engineering Programme was awarded 'A' grade by National Board of Accreditation (NBA)



Facilities Available

Electrical Engineering Programme is having well-equipped laboratories to cater the needs of U.G., P.G. and Ph.D. students. Following is a close glimpse at various existing laboratories:

- Electrical Machines Lab.
- Power Electronics Lab.
- High Voltage Engineering Lab.
- Switchgear and Protection Lab.
- Electrical Measurement and Network Analysis Lab.
- Linear Electronics Lab.
- Basic Electrical Engineering Lab.
- Microprocessor Lab.
- Computer Centre

Under guidance of learned faculty members of IITs, IISc and based on the suggestions by experts from Industries, R&D Organizations, and Alumni, laboratories are constantly being augmented to keep pace with the recent technology trends. Electrical Machines lab has been updated with inclusion of latest Solid State Drives. Power Electronics lab is enriched with state-of-the-art DSP hardware modules, Digital Storage Oscilloscope, etc., the same lab has also been augmented under the MODROBS scheme of AICTE. High Voltage lab is equipped with 100 kV AC and DC voltage sources and an impulse generator of 300 kV, 3 kJ.

Software Packages and Computing Facilities

- Computer Centre has got enough number of computers with latest processors. Most widely used simulation software packages like MATLAB, ETAP, MAGNET V6 (2D/3D), ANSYS (version 10.0), ORCAD, PSIM and PSPICE etc. are available for putting the students on acme of knowledge in competitive arena of modeling, and simulation.

Library & Information Centre

The library is computerized with a 25 terminal LAN operating with specialized software. The package facilitates issue, return, and reservation of books, online access to book catalogues. The library has total 2307 books titles with 3591 volumes for Electrical Engineering. The library has online database of IEEE/IET Electronics Library (IEL) which covers more than 780,000 documents from over 12,000 publications, including 233 journals, transactions, magazines, conference proceedings, IEEE standards. The students have access to entire collection through computers attached with CD-ROM facility. The center has adopted latest information technologies e.g., CD, DVD, Multimedia Kits, etc.



Research, Consultancy, Testing and Training Programmes Conducted

Facilities and expertise for consultancy and testing work:

Testing of motors, submersible pumps, insulators, insulating oil for dielectric strength, etc.

Testing of CVT, UPS, Stabilizers, Drives and other Power Electronic Converters

Testing and calibration of measuring instruments, Relays, CTs and PTs

Several faculty members of the Programme have obtained Masters and Ph.D. from IITs and IISc. The faculty members are involved with active research in the field of Electrical Engineering and have published large number of Technical Research Papers in National / International Journals / Conferences and won prizes for the Best Technical Papers. With an aim of putting efforts for focused and dedicated research in the field of Electrical Power, department is planning to establish a Centre of Excellence in Power Quality Improvement and Energy Saving using Advanced Power Electronics in Electric Power Systems. Currently, few research scholars are working in the field of applications of Power Electronics in Power Systems for Ph.D. degree.

Consultancy Projects Undertaken

- "20 MVA, 66/11 kV, Power Transformer Software Design" for the M/s. Voltamp Transformers Pvt. Ltd., Vadodara, Gujarat.
- "Designing of Power Circuits for UPS" for the M/s. Hi-Rel Electronics Pvt. Limited, Gandhinagar, Gujarat.
- A consultancy project on Design and Development of SMPS is undertaken for GELCO Electronics Pvt. Ltd.

Training Programmes Organized

As a part of consultancy, technical training is also bestowed to any industry or organization. Faculty members regularly arrange various training programmes, continuing education programmes, workshops and STTPs. Some of such programmes arranged by the faculty members of the Electrical Engineering are mentioned below:

- Executive Training Programme for "Engineers of Indian Air Force"
- Training Programme for Executives of Kalpataru Power Transmissions Ltd. and Zambian delegates
- Training Programme for Executives of Hi-Rel
- Thesis Workshop for Post Graduate Teachers on Guiding Master's Thesis: from Problem Formulation to Completion.
- AICTE Sponsored STTP on Design, Analysis and Control of Advanced Electrical Machines
- AICTE Sponsored Staff Development Programme on Inculcating Research Aptitude in Engineering Faculty
- STTP on Recent Trends in High Voltage Measurement and Testing Techniques
- STTP on Recent Trends in Power System Protection
- STTP on MATLAB for analysis and simulation of Electrical, Electronics and Control Systems

Activities Beyond Curriculum

- Industrial visits, interactions with practicing engineers and scientists
- Expert lectures by eminent persons from academics and industries
- Induction Training for faculty members
- Counselling of students on regular basis
- Continuing education programmes for faculty members and industry personnel