

DEPARTMENT OF ELECTRICAL ENGINEERING

DEI TECHNICAL COLLEGE

DAYALBAGH

The Department provides an in-house industrial environment through:

- Programmable Logic Controllers
- VVVF drives
- Control of various types of AC/DC motors
- Utilization of panel controlled synchronization of single and three phase alternators

The Electronics section:

- Caters to the needs of the electronics industry
- Trains students in design, manufacture and repair of electronic equipment
- Analog and digital circuits
- Networking and service and testing of electronic equipment
- TV, microwave and radar engineering
- Communications
- Power electronics
- Microcontrollers
- Programmable Logic Controllers
- Computer simulation

Electrical Machines Laboratory:

- Hands-on experiments with real machines
- Students gain practical experience on transformers and various types of machine drives
- Project work related to electrical machines and energy conversion
- D.C. Motors and Generators
- 3 Phase Induction Motors, (Squirrel cage and slipring type)
- 3 Phase Synchronous machines
- Single phase & 3 Phase Transformers
- 1 Phase Induction Motors (Various types)

The Electrical Workshop:

- Provide hands on experience in domestic and industrial wiring and testing
- Earth resistance measurement
- Testing of insulation material and oil
- Rewinding of rotors and stators etc.

Practical courses:

- DC Machines Lab, AC Machines Lab, Transformers Lab
- Load test, Hopkinson's test, Swinburne's test and speed control on DC Motors.
- DC generator setup Open circuit and Load characteristics,
- Open Circuit & Short Circuit Test
- Sumpner's Test, Polarity test and Load test on single phase and three phase transformers.
- Single phase & three phase Induction Motors to conduct Load test, Speed Control, No load & Blocked Rotor test.
- Voltage regulation, Slip test, Load test and V-Curve & Inverted V-Curve Characteristics on Synchronous machines.

Other duties executed by the Department of Electrical Engineering:

- Electrical repair and maintenance in various schools, colleges and faculties of DEI including TC, PV, REI and Primary School.
- Repair, maintenance and rewinding of fans, pumps, motors etc. of DEI, Dayalbagh and outside DEI.
- Conducting practical labs of diploma classes in Technical College
- Conducting modular Electrician/Wireman courses
- Training students in winding, maintenance and repair of electrical motor

Voc. Dip. In Information Technology

NSQF Aligned

- Fundamentals of IT
- Programming in C
- C Programming lab
- Object Oriented Programming in Java
- Introduction to Web Design (HTML/DHTML/Javascript etc.)
- Windows Programming with Visual Basic
- Software Engineering
- Database Management & Autocad
- Numerical Analysis using MATLAB
- C++ Programming
- Database Management Systems with Database Programming
- Computer Networks
- Android Programming
- Windows Configuration and Server Administration
- Labs based on the above courses

Diploma and Vocational Diploma being run in synchronous mode at :

Diploma in Electrical, Electronics and Vocational Diploma in Information Technology being run in synchronous mode at the following Centers:

- Derhgaon
- Kurnool
- Bolarum
- Bangalore
- Timarni
- Amritsar
- Murar
- MTV Puram
- Visakhapatnam
- Jamshedpur
- 3 centres in Delhi
- 3 centres in Agra