



EXPLORE INNOVATION EXCEL



# ELECTRICAL ENGINEERING

## PEC UNIVERSITY OF TECHNOLOGY

### PLACEMENT BROCHURE'16

The curriculum of Dept. Of Electrical Engineering, PEC is gingerly designed to provide engineering graduates consummate knowledge and skills required for a successful career in the field of Electrical Engineering. The course is at par with changing technology and enables the students to easily manage to multifarious environmental teams. Throughout the four-year program, students are encouraged to use their creativity and problem solving to explore and think about the unique problems in the world of electrical and computer engineering. Furthermore, students discuss some of the ethical dilemmas that are associated with the engineering in general, and how these problems relate to our Social commitment.

#### PROGRAMS OFFERED

**B.Tech.**

**M.Tech.**

**PhD**



## COURSES OFFERED

- Networks and Systems
- Electrical Machines
- Measurement and Instrumentation
- Mechatronics
- Analog and digital electronics
- Digital signal processing
- Microprocessors
- Engg Analysis And Design
- Computer Aided power system analysis

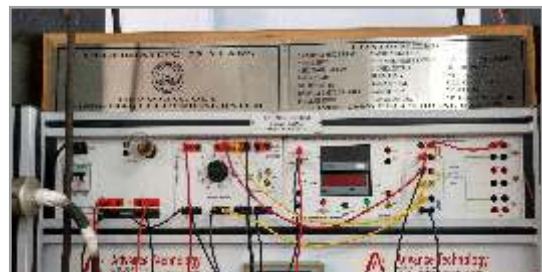
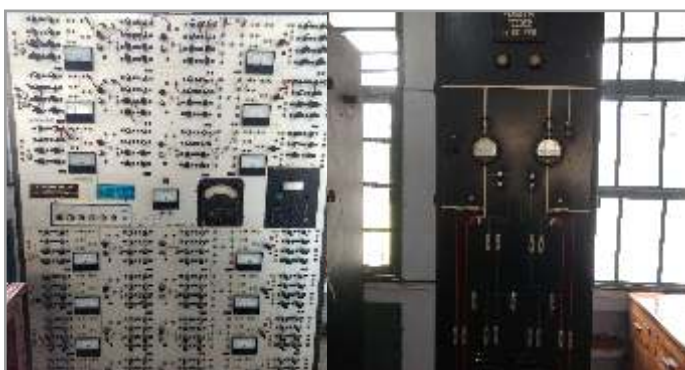
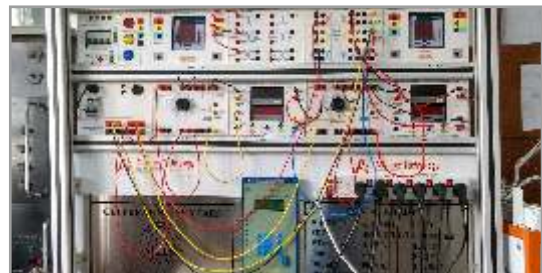
- Electrical Power Systems
- Fast transients in power systems
- Renewable Energy systems
- Neural Networks and Fuzzy Systems
- Energy Systems
- Electrical Drives
- Power Electronics
- Power Quality Engineering
- Switchgear and Protection

- Electrical Power Systems
- Fast transients in power systems
- Renewable Energy systems
- Neural Networks and Fuzzy Systems
- Energy Systems
- Switchgear and Protection
- Control System

- Power system operation and control
- Solar Power Engineering
- High Voltage Engg
- Biomedical Engineering
- EHV AC and DC Transmission
- Utilization of Electrical Energy and Illumination Engineering
- Smart Grid Technologies

## RESEARCH AREAS

- Energy Management
- PLC in Industrial Automation
- Electric safety
- Renewable Energy
- Smart Grids
- Sustainable Technologies
- Power Quality
- Multi-level Inverters for harmonic reduction
- Distributed generation
- Electrical Energy Auditing and Conservation in Small and Medium Scale Industries
- Hybrid Energy storage
- Micro-grid for rural electrification.
- Congestion management



## INDUSTRIAL COLLABORATIONS

### Mitsubishi Electric India Private Limited

Collaboration in the field of 'Factory Automation' and thus provided 'PLC Training Equipment and Programming Software' for the Mechatronics Lab of the institute.

### Tata Power Delhi Distribution Ltd. (TPDDL)

Collaboration for knowledge sharing and technical exchange in the area of technology and smart grid. Both will jointly work for co-development of products and solutions for the electricity distribution market, through joint workshops, hackathon, seminars, short term courses and events in the areas of engineering, software and hardware related to electricity distribution.

## INTERNSHIPS

### INDUSTRY & RESEARCH INTERNSHIPS

L&T | Siemens | Cadence | BRNO University of Technology, Czech Republic | Institut für Prozessdatenverarbeitung und Elektronik (IPE), Germany | Research Wire | Alstom Sandisk | JS Mobileon | General Electrical Havells | University of Padova, Italy | Carnegie Mellon University, USA

### FINANCE AND ANALYTICS

LexInnova | Goldman Sachs | Amazon (Opr.)  
Uber

## INFRASTRUCTURE- LAB AND EQUIPMENT

### TRANSMISSION AND DISTRIBUTION LAB

- Ring Feeders DIR OC PROT
- Feeder OC & E.I.D M.T.L Protection
- Generator MERZ-PRICE Protection
- Transmission System Modeling
- String Insulator
- Step up Transformer

### MECHATRONICS LAB

- Adaptive and Optimal Control
- System Simulation, Modeling and Analysis
- DSP Based applications in Control systems

### ELECTRIC MACHINES

- AC & DC motor drives
- Machine modeling
- Static Power Supply Drives
- Harmonics, Static Power Factor Compensation

### ILLUMINATION ENGINEERING LAB

- Goniophotometer
- Luxmeters
- Constant Voltage Transformer
- Luminaires (Indoor/ Outdoor): HPSV, HPMV, LED

### CONTROL SYSTEM LAB

- Adaptive and Optimal Control
- System Simulation, Modeling and Analysis
- DSP Based applications in Control systems

### MICROPROCESSOR LAB

- 8085 Microprocessor Trainer Kit
- 8086 Microprocessor Trainer Kit
- Universal Digital Logic Gate Experimental system
- Universal flip-flop counter and shift register Experimental system
- Universal half/full adder, subtractor, ALU Experimental system
- Universal multiplex, Decoder and Encoder Experimental system
- Transistor signal and Feedback Experimental system

### POWER ELECTRONICS LAB

- SCR Converter
- SCR Based Inverters
- Cycloconverters
- SCR Based Choppers
- Single phase half wave, full wave controlled rectifier
- Cathode Ray Oscilloscope.

### BIO MEDICAL LAB

- ECG machine
- Student also visited GMSH Sector 16, PGI Chandigarh and Fortis Mohali

### ENERGY AUDIT LAB

- Energy Audit Studies
- Re-engineering
- Power Quality Analysis
- Load Management Studies