Ministry of Labour and Employment (MOLE)
Incubation and Training Center

सत्यमेव जयते

Indian Institute of Technology Kanpur
Kanpur-208016, India

Technical Education in India- Statistics

Programme	No. of Colleges (as of 2013-14)	Intake Each Year	Source
Under Graduate-Engineering & Technology	3,384 (more than 4,100 now)	16,34,596	AICTE website
Post Graduate-Engineering & Technology	2,132	63,430	AICTE website
Diploma-Engineering & Technology	3,436	11,35,179	AICTE website
Industrial Training Institutes* (ITIs)	11,964 (2,284 Gov. +9,680 Pvt.)	16,92,836 (Seating Capacity)	MOLE/ DGE&T website

*One to three year programme. Get National Trade Certificate - under the National Council for Vocational Training (NCVT) in 73 Engineering and 48 Non Engineering trades

Incubation Goals

- Allow ITI students/ alumni to access the existing incubation center facilities to incubate their ideas/assist existing incubates.
- To set up an Incubator in the area of “Power Generation, Transmission, Distribution, Wring and Electrical Equipment”.
- Train selected ITI students/graduates in all areas of business operation
  - ✓ skill development
  - ✓ identification of appropriate technology
  - ✓ hands on experience on working projects,
  - ✓ project/product selection
  - ✓ opportunity guidance including commercial aspects
  - ✓ exposure to new technologies in the sector

Indian Power Sector (Source: www.cea.nic.in)

Installed Gen. Capacity as on 28th Feb., 2015

Fuel	MW	%age
Total Thermal	1,82,667	**70.0**
Coal	1,58,496	60.7
Gas	22,971	8.8
Oil	1,200	0.5
Hydro (Renewable)	40,867	15.7
Nuclear	4,780	1.9
RES**	31,692*	12.4
Total	2,61,006	

**include Small Hydro, Bio-mass/gas, Urban & Ind. Waste

*** 34351MW as per MNRE, as on 28 Feb, 2015**

High Voltage Transmission Capacity (as on 28-02-15)

(220kV & above about 309,116 ckt. km)

Capacity	MVA	Circuit km
765/800 kV	1,12,500	16,823
400 kV	1,92,107	1,34,398
220 kV	2,67,798	1,48,463
HVDC	13,500	9,432

Distribution network is much larger with millions of substations and transformers. Kanpur city itself has more than 4000 distribution transformers.

Recent Changes in Electricity Sector

- ✓ **Growing Renewable Power & Distributed Generations**
- ✓ **Increased use of ICT technology**
- ✓ **Restructuring and Competition**
- ✓ **Deployment of Power Electronic Converters and Controllers**
- ✓ **Smart Grid Initiative**
- ✓ **New types of insulating and conducting materials**

Few Statistics of Electrical Equipments Production/Sales (Ref. IEEMA presentation 2006-07 at MOP website)

Power Cables	:	99,430 km
Control Cables	:	52,412 km
1-phase Meters	:	10.17 million
3-phase Meters	:	2.312 million
LV Circuit Breakers	:	8,08,713
HV Circuit Breakers	:	52,026
Distribution Trans.	:	35,400 MVA
LV Motors	:	6,229 MW

Growing need to develop indigenous products using new material and technology.

Scope & Process of Selection

- Industrial exposure to ITI students/ graduates through Incubation center facilities and improve technical competence of students.
- Applications will be invited through wide publicity including press and website including State Govt.
- Maximum of 30 number of ITI Graduates will be taken at any point of time.
- 3 months training period during which each trainee will develop a project proposal and will submit for review to the managing committee.
- Commercial viable proposals will be recommended for incubation at the center for a maximum period of nine months.
- Each trainee will be given sustenance allowance.

Thank You