

COURSE OBJECTIVE:

This subject has been introduced for the undergraduate students of B.E. Electrical Engineering as an introductory minor course giving a broad spectrum of the prevalent technologies, career opportunities and prospects in the area of academics, industries and research and development in leading organizations.

COURSE CONTENT:

An overview of Electrical Engineering, Generation, Transmission and Distribution, Distributed generation, National Power Grids, Smart Grid

Various electrical equipments viz Transformer, Induction motor, synchronous machine, Circuit Breakers etc, Relays, substation components, Product specification, application

Leading manufacturers of Electrical equipments and components, Electrical Engineering research organization, PSUs and utilities

General Introduction to Power Electronics, Power System, Electrical Machines, Control System, Automation

Role of Electrical Engineer in Industry, R&D, Electrical Utilities, Placement scenario, future trends

COURSE OUTCOMES:

The final outcome of the subject will result into an enhancement in understanding vast spectrum of opportunities and applications of electrical engineering for an incumbent undergraduate student. Latest trends and technologies in the area of renewable energy, smart grid and industrial control will be the key outcome of this subject.

EVALUATION:

Evaluation will be continuous an integral part of the class only through internal assessment

REFERENCES:

1. *D.P. Kothari & I.J. Nagrath, Basic Electrical Engineering, Tata McGraw Hill, latest edition.*
2. *M.S. Sukhija, T. K. Nagsarkar, Basic Electrical and electronics engineering, Oxford University press,2012*