

COURSE	Name	: Electric Power Distribution
	Code	: EE184614
	Credits	: 3
	Semester	: V

Description of Course

Distribution power system discuss about basic concepts, design of electric power distribution systems both primary and secondary distribution, and problems in the electricity distribution system that includes operation, voltage stability, and losses in the electric power system.

Learning Outcomes

KNOWLEDGE

(P02) Mastering the concepts, procedures and principles of engineering and realizing them in the form of procedures required for system analysis and design in electric power systems, regulatory systems, multimedia telecommunications, or electronics.

SPECIFIC SKILL

(KK02) Able to describe the resolution of engineering problems in electric power systems, regulatory systems, multimedia telecommunications, or electronics.

GENERAL SKILL

(KU04) Able to make decisions appropriately in problem solving in their field of expertise, based on the results of analysis of information and data.

ATTITUDE

(S09) Demonstrate the attitude of being responsible for work in thier area of expertise independently

(S12) Working together to make use of their maximum potential of expertise independently.

Course Learning Outcomes

KNOWLEDGE

Mastering the design concept of Electric Power Distribution along with the introduction of equipment in Primary and Secondary Distribution Substations and Networks, analyzing problems in the electricity distribution system which includes operations, voltage stability, and losses of electric power systems.

SPECIFIC SKILL

Able to recognize the equipment of Primary and Secondary Distribution Networks and Distribution Working Principles, introduce the principles of distribution network protection, know the voltage drop and network losses, improve power factors and analyze the distribution system reliability.

GENERAL SKILL

Able to make decisions on the selection of equipment components Substation and Electric Power Distribution Network, plan and analyze the electric power distribution system.

ATTITUDE

Having responsibility inwork, both individually and groups.

Main Subjects

1. Review of the Electric Power System
2. Transmission Network
3. Distribution Substation and Equipment
4. Primary and Secondary Distribution Networks
5. Calculation of voltage drop, network losses and power factor in the network.
6. Network protection
7. Reliability of distribution systems

Reference(s)

- [1] Turan Gonen, Electric Power Distribution System Engineering
- [2] Westinghouse Electric Corporation, Distribution Systems
- [3] Irwin Lazar, Sistem Kelistrikan Industri
- [4] Electric Power Distribution Handbook, T.A. Short

Prerequisite(s)

EW184003 Electrical Circuit
EE184402 Introduction to Power System
