

EE501 Power System Operation and Control

Credit: 3

Approval: Approved in 2nd Senate

Prerequisite: Consent of the faculty member

Students intended for: UG and PG

Elective or Core: Elective

Semester: Odd/Even:

Course content:

An overview of power system operations and control, basic objectives of security and economics in power system operation and control, security analysis, reactive power dispatch and optimal power flows, automatic generation control, reactive power control, state estimation, brief introduction to power system restructuring and power market operations.

Text & Reference Books:

Textbooks:

A. J. Wood and B. F. Wollenberg, Power generation, Operation and Control, 2nd ed., New York: John Wiley and Sons, 1996.

PrabhaKundur, Power System Stability and Control, 1st edition, Tata Mcgraw Hill Education Private Limited, 2006.

Loi Lei Lai, Power System Restructuring and Deregulation: Trading, Performance and Information Technology, John Wiley & Sons, 2001