Electric Power Systems

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Date	Wed 10-12am, Fri 13-15am, ETF C1
Hours/Credit points	6 credits
Type	Compulsory core course
Course number	227-0122-00L

Subject

Abstract:
Introduction to theory and technology of electric power systems.

Objective:
At the end of this lesson, the student will be able to: describe the structure of electric power systems, name the most important components and describe what they are needed for, apply models for transformers and lines, explain the technology of power lines and switchgear, calculate stationary power flows and other basic parameters in simple power systems.

Course Material (Exercises, Announcements, etc) – LINK

Lecture Notes:

Lecture notes

Exercise problems

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Contents

Structure of electric power systems, transformer and power line models, analysis of and power flow calculation in basic systems, symmetrical and unsymmetrical three-phase systems, technology and principle of electric power systems, transient processes, basics of current interruption, (switching) arcs and switchgear.

Download of *PowerWorld Simulator* demo version.

Documents Download

Words and terms in power systems analysis