

## ECE 597D ST-POWER SYSTEMS

### INSTRUCTOR3

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Office Hours: Wednesdays and Fridays 11:00 AM to 12:00 noon ( or by e-mail)3

### COURSE FORMAT

Lectures 4:00 to 5:15 PM Tuesday and Thursday @Elab 303

### DESCRIPTION

Introduction to Power Systems. Review of AC Circuits. Line Parameter Calculations. Steady State operation of Transmission lines. Modelling of Transformers and Loads. Power Flow Analysis. Symmetrical Fault Analysis. Symmetrical Components and Unsymmetrical Fault Analysis.

### PRE-REQUISITES

Knowledge of circuit analysis, basic calculus and differential equations, elementary matrix analysis and basic computer programming.

### TEXTBOOK

**Power System Analysis and Design 6th Edition**

by **J. Duncan Glover, Thomas Overbye and Mulukutla S. Sarma**  
CENGAGE LEARNING

### TENTATIVE LECTURE PLAN

Sl No.	Month	Dates	Topic	Book Chapter
0	Sep	3	ICE BREAKING	0
1	Sep	5	Introduction	1
2	Sep	10,12,17	AC Circuits Review	2
3	Sep	19,24,26	Transformer Modelling & Load Modelling	3
	OCT	1		
4	Oct	3,8,10	Line Parameters	4
5	Oct	17,22	Steady State Operation	5
6	Oct	24,29,31	Power Flow	6
	Nov	5		

7	Oct	31	Mid Exam	
8	Nov	7,12	Symmetrical Faults	7
9	Nov	14, 19	Symmetrical Components	8
10	Dec	21,3,5	Unsymmetrical Faults	9
11	Dec	10	Feedback	
12	Dec		Final Exam	
13	TBA		Visit to CHP UMASS	
14	TBA		Visit to ISO New England	