Power System Analysis

Course Layout

EE 463 (052)

INSTRUCTOR	OFFICE	PHONE	E-MAIL
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Textbook: Power System Analysis, by **Hadi Saadat,** McGraw Hill WCB, 2nd Edition , 2002

References

1. Power System Analysis and Design, by **J. Duncan Glover and Mulukutla S. Sarma**, Brooks/Cole Third Edition, 2002.
2. Power System Analysis**, By Grainger,** McGraw Hill, 1994.
3. Elements of Power System Analysis, by **William Stevenson**, McGraw Hill 4th Edition, 1982.

Chapter	No. of Lectures	Topics	Home Work
1-3	**4**	The basic concepts: representation, equivalent circuit, pu system (notes + 3.13,3.14)	(HW= 1): 2.7, 3.11, 3.12, 3.13, 3.15
6	**7**	Power Flow Analysis (6.1-6.10)	(HW= 2): 6.4, 6.7, 6.8 (a, b) (HW=3): 6.9, 6.10, 6.12
8-9	**6**	Synchronous Machine Transient Analysis (8.1,8.2) & Balanced Fault (9.1-9.6)	(HW=4): 8.1, 9.1, 9.2, 9.5, 9.8, 9.10, 9.11, 9.12
10	**6**	Symmetrical Components and Unbalanced Fault (10.1-10.9)	(HW=5): 10.10,10.14,10.16
7	**3**	Optimal Dispatch of Generation (7.1-7.4)	(HW=6): 7.6, 7.8, 7.9, 7.10
11	**2**	Stability (11.1-11.6)	(HW=7): 11.5, 11.6, 11.7
	2	Project Presentations	

Grading

Quiz and Homework	:	15 (From Home work and class work).
Major I	:	20
Major II	:	20
Term Project	:	10
Final Exam	:	35

Major Exam I : Sunday, **March 26th, 2006, 6:00 to 7:30 PM**

Major Exam II : Sunday, **May 7th , 2006, 6:30 to 8:00 PM**

Term Project:

The term project is supposed to simulate analysis and planning cases for a practical power system. The details of the project are to be elaborated by the instructor at a subsequent stage during the semester.