Course title and number: ECEN 614: Power System State Estimation
Term (e.g., Fall 200X): Fall 2010
Meeting times and location: Mondays and Wednesdays, 5:45-7:00pm, HRBB 104

Course Description and Prerequisites

This course aims to introduce graduate students with engineering backgrounds to the theory and applications of state estimation in electric power systems. Mathematical formulations, numerical algorithms, and implementations of state estimation in electric power systems will be covered.

Prerequisite: ECEN 460 (or equivalent) and Linear Algebra, or permission from the instructor

Instructor Information

Name: Le Xie
Telephone number: TBC
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Office hours: TBC
Office location: TBC

Textbook and/or Resource Material

1. A. Abur and A. Gomez Exposito, Power System State Estimation: Theory and Implementation, CRC 2004
2. Research papers assigned by the instructor

Grading Policies

Homework Assignments (20%) + Mid-term Exam (30%) + Final Project (30%) + In-class Quiz (20%)

Course Topics, Calendar of Activities, Major Assignment Dates

Weighted Least Square State Estimation, Network Observability Analysis, Bad data detection and identification, Robust State Estimation, Network Parameter Estimation, Topology Error Processing, and Cyber Attacks Against State Estimation.
(More detailed calendar will be posted soon)

Americans with Disabilities Act (ADA)

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact Disability Services, in Cain Hall, Room B118, or call 845-1637. For additional information visit http://disability.tamu.edu

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