Catalog Description: DC, PMAC, and induction machine testing, operation, and control. Lab.

Credits: 1       Terms Offered: Winter

Prerequisites: Corequisites: ECE 331
Courses that require this as a prerequisite: NA

Structure: 170 minute lab section, once per week.

Instructors: Ted Brekken

Course content:
- DC machine parameter estimation
- DC machine analysis and control
- PMAC machine parameter estimation
- PMAC machine analysis and control
- Induction machine parameter estimation
- Induction machine analysis and control
- Drives analysis and control

Measurable Student Learning Outcomes:
Upon completing this course, students will be able to...

1. Estimate electrical machine parameters (ABET Outcomes a, b, c, e, K)
2. Design electrical machine control systems (ABET Outcomes a, b, c, e, K)
3. Analyze electrical machine performance (ABET Outcomes a, b, c, e, K)
4. Evaluate performance of electrical machine drives (ABET Outcomes a, b, c, e, K)

Learning Resources:
- Lab manual (provided)

Evaluation of Student Performance:
- 20% Pre-lab assignments
- 80% Lab reports

Accommodations:
“Accommodations for students with disabilities are determined and approved by Disability Access Services (DAS). If you, as a student, believe you are eligible for accommodations but have not obtained approval please contact DAS immediately at 541-737-4098 or at http://ds.oregonstate.edu. DAS notifies students and faculty members of approved academic accommodations and coordinates implementation of those accommodations. While not required, students and faculty members are encouraged to discuss details of the implementation of individual accommodations.”
Expectations for student conduct:
The code of student conduct can be found at http://studentlife.oregonstate.edu/code

Revised: 7 Nov 2018