



Rensselaer

Course Syllabus

Course Information

EPE lab		ECSE 4130	Section 1
RPI Spring 2019	4 cr		
Lecture	W	12:00PM-12:50PM	WebEx
Lab	W	1:00PM-3:50PM	JEC 3108
Course Website: http://lms.rpi.edu/			

Prerequisites or Other Requirements:

ECSE 4080 or ECSE 4110 or ECSE 4120 or permission of instructor.

Instructor

Meng Wang

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JEC 6024

Office Hours: WebEx TBD

Course Text(s)

There is no required textbook for this class. All the related materials are available on LMS. Students are expected to be familiar with the scope and the expectations of each lab before the class.

Course Goals / Objectives

A laboratory based examination of static and rotating energy conversion equipment. Topics include the experimental study of the physical phenomena and characteristics of magnetic circuits, transformers, electric machines, rectifiers, DC/DC converters, and inverters. The interaction between static power converters and electric machines is emphasized. The course includes both in-lab experiments and online simulation.

Grading Criteria

Lab reports 80%. One report for each lab. One group only submits one report. The report is due one week after the lab. In the rare case that a report is submitted late, it will be penalized 10% per working day. Grades are distributed evenly over all the reports, with the exception that the last report is weighted three times as a regular report.

Lab preparation and participation 20%. Please review the materials BEFORE each lab. Please participate actively in your team for all the labs.