

**ECE-20****Title of Project – Remote RLC Load Control for Drexel University Power System Laboratories****Advisor(s)** – Dr. Chika Nwankpa, Ph. D**Co-Advisor** – Valentina Cecchi**Team** – David Martin ~ Computer Engineer – 10172227

Bahiy Shahid ~ Electrical Engineer - 10684397

Coung Khau ~ Electrical Engineer - 10702380

Zhenhui Cai ~ Electrical Engineer - 10400822

**Abstract**

Drexel University's Center for Electric Power Engineering Power (CEPE) laboratory has been equipped with power systems instruments that are designed to provide students with a hands-on learning experience about the behavior of different load systems. The load systems that students use in laboratory experiments are resistive, inductive or capacitive (RLC). The discrepancies that students face in the laboratory are that valued data is discrete making the data obtained approximated. In confronting this issue and others, the senior design proposed to implement a Remote Controllable Load System. The project would allow students to perform laboratory experiments with loads remotely activated by computer stations decreasing the amount of error that would likely happen in the lab. The controllable load system would also enable students to automate data acquisition process which would acquire exact data. MATLAB and LabView software has been used as the foundation in the development of the project.