

**Course Title: Power and Control Laboratory Work**

**Course Code: PCEG 403**

**Credit Hours: 1**

**Course Description:**

This course intends to reinforce the concepts taught in Control System Design and Power System II that have a strong practical applications emphasis, by a series of relevant experiments carried out in the laboratory.

**Course Contents:**

A series of experiments is to be done to reinforce the subject matter taught in 'COEG401: Control System Design' and 'EPEG415: Power Systems II'. The exact courses covered by laboratory work may vary. Experiments for the following topics, for the courses, can be conducted:

1. Load flow study
2. Fault analysis
3. Transient and steady state analysis
4. Control system design using MATLAB
5. PID controller design
6. PLC based system design

**Evaluation:**

In-Semester Evaluation: 80%

End-Semester Evaluation: 20%