

Senior Design Project Description for FALL 2016

Project Title: Analytics for Energy Efficient Buildings (UNCC_ENERG)

Supporter: UNC Charlotte ECE

Supporter Technical Representative: ASSIGNED

Faculty Mentor: ASSIGNED TBD (check one)

Single Team Dual Team (check one)

Personnel (EN/ET): 3 E, Cp, Cv, 3 M, SE

(Complete if the number of students required is known)

Expected person-hours: (250 per student)

Description of Project:

It has become quite common to deploy analytic software to detect faults in building systems and bring them to peak operation. This project is focused upon developing software to help find faults in building systems, and testing the software on a number of buildings in the Charlotte Metro region. Various facility owners and property management firms will be working in partnership on this effort, including Cousins Properties and Lincoln Harris.

Initial Project Requirements (e.g. weight, size, etc.):

This project will required the team to visit several buildings (minimum of 10) to determine the types of faults that reduce energy efficiency in buildings. Software must then be developed to detect these faults. The analysis tools will be Excel based.

Expected Deliverables/Results:

- Excel-based data analysis tools for examining building automation system data
- Reports on at least 10 different buildings in the Charlotte metro region

List here any specific skills or knowledge needed or suggested (If none please state none):

None