



UNC CHARLOTTE

The WILLIAM STATES LEE COLLEGE of ENGINEERING

Senior Design Project Description for SPRING 2016

Project Title: Occupancy Sensor Rollout (FM-OSENSOR)

Supporter: Facilities Management

Supporter Technical Representative: ASSIGNED

Faculty Mentor: _____ ASSIGNED TBD (check one)

Single Team Dual Team _____ (check one)

Personnel (EN/ET): 1 E, _____ Cp, _____ Cv, 1 M, 1 SE

(Complete if the number of students required is known)

Expected person-hours: (250 per student)

Description of Project:

Most buildings on the UNC Charlotte campus lack or have limited use of occupancy sensors to regulate energy consumption. It is hoped that a rapid and standard adoption (vs. a slow and uncertain adoption) will improve acceptance by occupants and utilization by facilities managers. This project will study the options for uniform use of occupancy sensors in campus buildings.

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

The occupancy sensor study must determine the optimum sensor for use in campus buildings. It must be capable of a quick implementation at the lowest possible cost. It should be integrated with the lighting, ventilation and heating/cooling systems. A cost benefit analysis is required.

Expected Deliverables/Results:

The deliverables will include a report that includes the options analyzed and a cost benefit analysis for the preferred system.

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

None