ECE 3334: Computer Engineering Project Laboratory

Credit / Contact hours: 3 / 3

Course coordinator: Brian Nutter

Textbook(s) and/or other required material:

Catalog description: **Computer Engineering Project Laboratory (3:0:9).** Prerequisite: ECE 3303, 3311, 3331, and 3362. For CMPE majors only or departmental consent. A laboratory course to accompany third-year basic courses in computer engineering. (Writing Intensive)

Pre-requisite(s) or co-requisites: ECE 3303, 3311, 3331, and 3362. CMPE majors only.

Designation: Required

Course learning outcomes: Upon completion of this course, students should be able to do the following:
1. Identify, analyze and solve practical electrical or computer engineering problems by applying knowledge of mathematics, science and engineering with modern engineering tools.
2. Design a system, component or process to meet desired needs within realistic constraints.
3. Communicate effectively through oral presentations and group discussions.
4. Communicate effectively through written reports and other documents.
5. Design and conduct scientific experiments, and to analyze and interpret the resulting data.
6. Function and communicate effectively, both individually and within multidisciplinary teams.
7. Interact with other students, faculty and practicing professionals on professional and ethical responsibility issues.
8. Recognize the need for, and ability to engage in learning by working on projects, both individually and within multidisciplinary teams.
9. Use basic statistical techniques to analyze data.

ABET Student Outcomes addressed: a, b, c, d, e, f, g, h, i, j, and k.

Topics covered:
Students, working together in teams of two or more, are required to design, construct and test electronic systems to meet given specifications. Each student is required to submit interim and final written and oral reports. Each student presents on an approximately weekly basis as is indicated in the schedule. Written feedback is provided for all oral presentations and written reports concerning communication style, effectiveness and technical content. The projects assigned are in the area of development of microprocessor based systems.