

## **COT 6900 Directed Independent Study**

### **Description:**

**3 Credits, Time and Place TBA.**

*Prerequisites:* Graduate Status.

The course is project oriented and open for graduate students in the College of Engineering. Students from other disciplines may participate in this course if they propose an academic project based on a special interest of their specific disciplines but still related to Engineering subjects.

### ***TRACK 1:***

Hardware and/or Software project where you participate in the design and/or implementation of a real engineering system that serves any real life application. Your participation could be an overall system integration, a specific hardware subsystem development, sensor interface, computer interface, human interface, application design, software development, etc.. You may work in teams to build big projects. Available in the lab is a variety of hardware platforms from various vendors such as Computer Dynamics Pentium SBC with touch LCD screen, Motorola 68000/HC11 SBC, Z-World Compact Controllers, Diamond Systems Corp PC/104 form SBC, Data Acquisition Systems, Parallax Stamp Controllers, and others. You may build your own if you wish. Software packages include LabVIEW, Visual Basic, Visual C++, C, Java, or you bring your own software development tools.

### ***TRACK 2:***

Research oriented students can search the various proceedings journals in any disciplines, universities or companies web sites, and/or any place on the internet for ideas and recent findings in engineering or any related area. The final outcome is a publishable report or paper which explores on some engineering or related application. The report must include a statement of the problem, a survey study to indicate the current state of the art, and significant details on the proposed solution. You should use an adequate amount of citations and Reference. Research resources are available in the library or the Internet.

### **Grading Policy:**

Grades will be determined primarily on the completion of the HW/SW project including documentation and presentation, or final research paper with a high publication potential and a class presentation. Attendance and active participation also affect the final grade.

### **Tentative Deadlines:**

Week 1: Before you sign up for the course, submit a typed one page proposal.

Week 3: Final proposal with all details on the entire project.

Biweekly: Update you log sheet and get it signed in my office.

Week 8: First draft of you project report / paper

Week 11: Second draft of your project/ paper and an oral presentation

Week 15: Final report submitted along with the log sheet and a final oral presentation.