

ENGR 2210: Project Overview

Preproposal due March 4, 2008
Proposal due March 11, 2008
First Design Review March 28, 2008
Second Design Review April 15, 2008
Final Demo in class April 29, 2008
Final Report due TBA

After the third lab ends, you will be working for the remainder of the semester in a team of between three and five students to design a mechatronic system around a PIC microcontroller. Your project must include both a nontrivial mechanical system design and fabrication and a nontrivial electronic system involving hardware and firmware aspects. There will soon be a project wiki with some rough ideas that have been submitted by various members of the Olin community for projects. Your team may adopt and flesh out one of these or modify it as you see fit. You are also free (and, in fact, encouraged) to come up with your own project idea. It is entirely permissible for more than one project group to adopt the same basic project concept. While you are free to develop your own project idea, your project will be subject to certain budgetary, materials, and process constraints.

Project Milestones. By Tuesday, March 4, each group must submit electronically a brief (no more than two pages) preproposal sketching what you hope to design for your project, including a brief description of the system and its functionality. You should send your preproposal via e-mail to Brad. He will read these, evaluating each for proper scope, and return them to you by the following class period with comments. Then, on Tuesday, March 11, each group will submit a full project proposal including an abstract, project description, a statement of work, a schedule, and a projected budget. On Friday, March 28, and Friday, April 15, each group do a brief (lasting approximately 15 minutes) design review presentation with both Anthony and Brad detailing the status of your project. During the last class period, each group will provide a demo and a brief, informal oral presentation detailing the state of their project. Finally, at the end of the semester, each group will need to submit a final report, documenting the entire project. Your final report can either be a written report or a project web site. Regardless of the form that you choose, the final project report will be due during the time scheduled for the class during the final assessment period. When we learn the specific time, we will announce when the final report is due.

Project Logistics. Each project group will have a total project budget of \$350 to cover the cost of materials, supplies, fabrication, and shipping. You are certainly welcome to spend more than \$350 on your projects, but you will be responsible for covering any additional costs. Electronic components should generally be ordered through the on-line ECE Stockroom system, called Yoink (<http://yoink.ece.olin.edu>). To purchase other types of supplies you might need, you will generally need to purchase them and get reimbursed. To do so, you will need to provide original receipts, fill out a copy of the Student Reimbursement Form, which you can get on the Public drive in the "Student Projects" folder, have one of the course instructors sign it, and turn it in to Holly Bennett (OC 360). Olin generally discourages the use of expedited shipping, and will not reimburse for overnight shipping. Please plan your orders accordingly.