

ESE205 — Introduction to Engineering Design

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General Information

Prerequisites: CSE131, Phy117A or equivalent.

Lectures: Cupples II Hall, room L009

Laboratory: Urbauer Hall, room 015.

Webpage: <http://classes.engineering.wustl.edu/ese205>

Teaching Assistants:

- William Luer (wluer@wustl.edu).
- Natalie Ng (natalie.ng@wustl.edu).
- Andrew O'Sullivan (a.osull@wustl.edu).
- Nathan Schmetter (nwschmetter@wustl.edu).

Description

A hands-on course where students, divided in groups of two or three, will creatively solve one problem throughout the semester using tools from electrical and systems engineering. Each group decides their own work schedule throughout the semester, and a demo session will be held at the end of the semester where the resulting projects will be showcased to the SEAS community. The groups will work under the supervision of a teaching assistant which will help them complete their project.

We will only have four lectures in the whole semester, one each week on Friday at 4pm-5pm between Jan. 20 and Feb. 10.

Evaluation

Webpage and weekly journal (20%): Each group must create a wiki page describing their project proposal. Each group will maintain a weekly wiki journal, detailing their progress and the challenges they have faced.

Weekly meetings with TA (20%): Each group will meet with their TA in the laboratory, **at least** once a week for one hour.

Progress evaluations (20%): Twice in the semester we will evaluate the progress of each project in a 30-minute meeting with the team.

Final demonstration and report (40%): We will hold a public poster and demonstration session at the end of the semester. Also, each group will update their project wiki page describing their results and conclusions.

Milestones

Group definitions and project wiki page: *Due Friday Jan. 27 at 5pm.* Each group creates a simple wiki page listing the team members and their project idea. Each member in the group must follow these guidelines to create their user in our wiki webpage:

http://classes.engineering.wustl.edu/ese205/New_student_checklist

Project proposal: *Due Friday Feb. 3 at 5pm.* The proposal must be written in your wiki page, following the guidelines listed here:

http://classes.engineering.wustl.edu/ese205/Project_proposal_guidelines

First project evaluation: *Week of Feb. 27 to Mar. 3.* The full academic team will meet with each group for 30 minutes to discuss the progress and challenges of their project. Each team is responsible for scheduling their meeting.

Second project evaluation: *Week of Apr. 3 to Apr. 7.* Same procedure as with previous evaluation.

Demonstration and poster session: *Tuesday Apr. 25 at 11:30am-1pm.* Each group will present a poster and a demonstration of their project to the SEAS community, following the guidelines listed here:

http://classes.engineering.wustl.edu/ese205/Demonstration_Session_Guidelines

Final report: *Due Tuesday May 2 at 5pm.* Finalize your wiki page with results and conclusions, following the guidelines listed here:

http://classes.engineering.wustl.edu/ese205/Final_report_guidelines