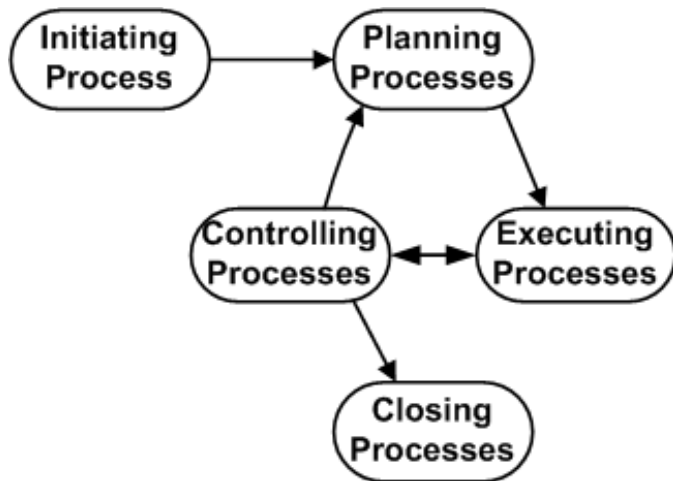


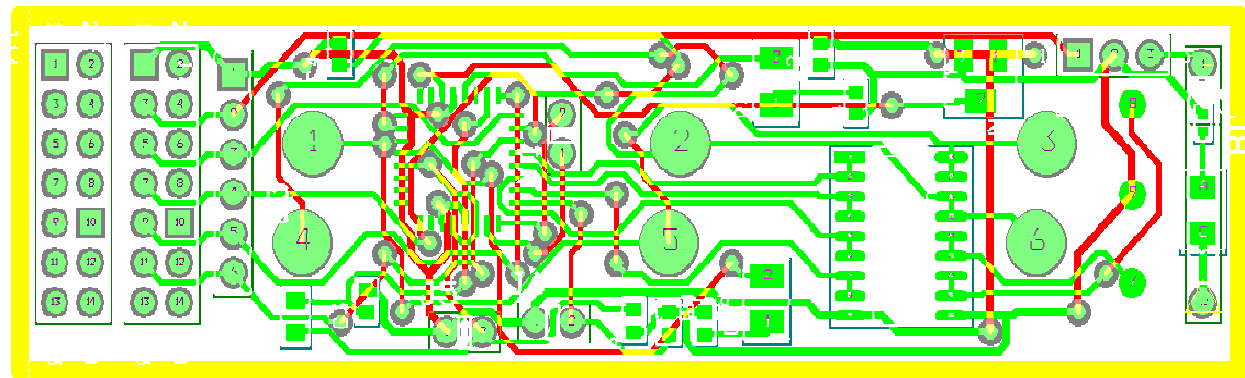
Multi-disciplinary Senior Design



James M. Conrad, ECE

Outline

- Why “Projects”
- Why multi-disciplinary
- Student benefits
- How it will run



Why projects?

The Lee College of Engineering's senior design program brings together students and industrial partners in a collaborative research environment. As they tackle real-world engineering projects, the engineering students and their industry sponsors are afforded unlimited possibilities for learning and achievement.



Students ask: What's in it for me?

Apply design skills and theory learned in the last three (four?) years to a problem that will take a substantial amount of time.

However, you really need to practice more than engineering design.

You future job requires you to know more than engineering.
(ask those whose jobs were outsourced overseas)

You need to be a ***PROBLEM SOLVER***

The Importance of Project Management

- Many engineers are now either faced with management responsibilities at their current positions, or promoted to higher positions
 - They need to have PM skills to manage various aspects of a project-driven technological organization combining engineering problems, human factors, and financial issues and to work in a cross-functional team
 - Consequently, to be successful in this work environment, it is crucial for engineers to have some level of PM knowledge and experience **BEFORE** they join the workforce
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“New” senior design model nation-wide

- Work on real-world problem
- Use PM skills along with design/technical skills
- Work in multi-disciplinary teams
- Work over two semesters (design, then implement)



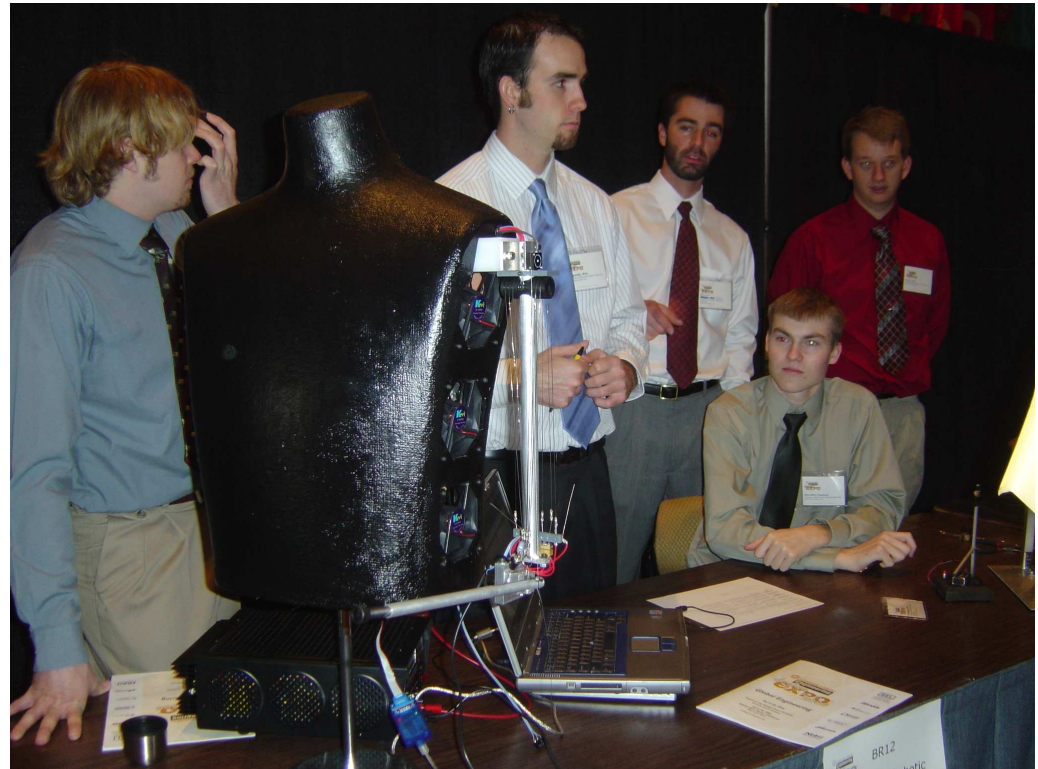
Why OUR senior design program

1. Work on an actual problem where some REALLY wants the results of your work (not a toy problem).
 2. Work directly with REAL engineers at REAL companies so you can see what they REALLY do.
 3. Have a great story to put on your resume.
 4. Have a great story to tell during your interview.
 5. Interface with people from many companies.
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Jobs, jobs, jobs

Consider, 70% of jobs are found through networking. You will meet 40-60 people with the potential of hiring you when you graduate because they will see you:

- At the sponsor's breakfast
- At the December expo
- At the May expo



Syllabus

