



## What Majors Are Students Interested In?

At midsemester of EF 151, we have a presentation on the different engineering disciplines during the lecture time. During recitation time, all the degree programs set up displays and the students are able to visit with faculty and students from the program to help them decide on their major. We polled the students, obtaining the results shown in the tables below.

| How many different engineering disciplines are you still considering? |     |
|---|-----|
| Already set on one  | 49% |
| Narrowed down to 2  | 30% |
| Considering 3 or 4  | 12% |
| Completely undecided  | 4%  |
| Switching out of engineering  | 5%  |

| If you had to choose today, what discipline would you choose? |     |
|---|-----|
| Biosystems Engineering  | 3%  |
| Chemical Engineering  | 13% |
| Civil Engineering   | 13% |
| Electrical or Computer Engr                                   | 17% |
| Industrial Engineering  | 4%  |
| Materials Science and Engr                                    | 5%  |
| Nuclear Engineering   | 8%  |
| Mechanical Engineering  | 16% |
| Aerospace Engineering   | 10% |
| Biomedical Engineering  | 11% |



### Bonus for Early HW Completion

We are typical of most classes, and a penalty is given for late homework. A paper at the 2010 ASEE Conference suggested that if there is a penalty for late homework, there should be a bonus for early homework. The logic was that this was like many construction projects, where bonuses can be earned for early completion. Starting this week in EF 151 we are awarding a 10% bonus for any homework problems worked at least 24 hours before the due date. Part of the purpose is to encourage students to look at the homework problems early on so that even if they cannot initially work them, there is ample time for them to get help. We will be analyzing the effect of the bonus, and report the results in a future edition.

## Tennessee Teaching and Learning Center

Engineering Fundamentals has been using the resources of the Tennessee Teaching and Learning Center to improve our courses. At their suggestion, we have implemented two things.

1. Students work together at tables of 4 in recitation. Previously students were able to choose their tables. We have started assigning seats, with one person from each quartile of the class being assigned to each table. Although there was some initial grumbling, this seems to have helped the teams work together and with the understanding of the concepts.
2. Dick Bennett attended a workshop by the center on classroom assessment. One suggestion was to periodically get feedback on the lectures by asking students at the end of lecture to anonymously write down the clearest point and the muddiest point. This provided good feedback on a lecture we recently added on light. Several changes will be made to the lecture as a result of the feedback.