Engineering Students' Forum

Sponsored by the SWE student chapter
10 April, 2006 – Noon to 1 pm in ET 107

Present: *Dr. Gerard Voland* – Dean of the School of Engineering, Technology, and Computer Science
Dr. Carlos Pomalaza-Ráez - Chair of the Department of Engineering;
Around twenty five engineering students

Summary

Introduction

Dr. Ráez thanked the SWE student chapter and in particular Ms. Amanda Irish for making the arrangements for this Forum and for bringing pizza and drinks. Dr. Ráez also thanked all the students for their participation in the forums. He pointed out that issues such as a room for the student organizations and increased access to computer laboratories have been possible due to the persistence of the students attending past forums. He finished the introduction by announcing that Physical Plant has agreed to replace the lighting setup in the lobby so students can benefit from better conditions when reading and studying in that building area. This upgrade will take place at the end of the current semester.

The following issues were brought forward by the students:

- **When will a 24/7 laboratory become available?**
  Dr. Ráez and Dr. Voland explained that the main obstacles to having this type of laboratory are the lack of space in the building and the associated logistics. The ET building is locked after 11:00 pm which means that special arrangements would be needed to allow students access to this laboratory. Dr. Ráez reminded everyone that engineering students can have access to the engineering laboratories at any time and day of the week (including weekends). To have this type of access students should go to the department secretary and ask her to include their names on the list that the department sends to the campus police. Upon request the campus police can open the doors of the building and of the laboratories when they are closed after normal working hours. This list is also used to allow students to stay in the laboratories if they are already working there when the building is being closed for the day.

- **Allow students a more direct input in the updating of the curriculum**
  A student asked about the possibility of having a student representative provide input whenever the curriculum is being revised and updated. Dr. Ráez stated that he will bring this issue to each curriculum committee so they can decide how this request can be addressed. He mentioned that students' comments on

the evaluations of the achievement of course outcomes are taken into consideration when reviewing the curricula.

- **The content of ECE/ME 280/281 does not provide as much new material to the EE and CmpE students as it does to the ME students**
  Dr. Ráez agrees with this assessment. These courses provide important topics in electronics, digital logic, and computer architecture to the ME students whereas the EE and CmpE students have entire 3 or 4 credit courses for each of these topics as part of their course requirements. Dr. Ráez and Dr. Liu, as well as Dr. Kang, have recently had discussions about reviewing and upgrading the content of these courses to address this imbalance. The updating of these courses is necessary for the reasons mentioned above, as well for the fact that these courses will be taught during the junior year for all the engineering programs. One way to add more content value for the CmpE and EE students is to increase substantially the amount of statics and dynamics material, since these topics are not required in their curricula. This new material would "even out" the amount of new knowledge that all the engineering students get from these courses. Dr. Ráez will send these comments to the curriculum committees.

- **There is not much variety in the choices for the mechanical engineering technical electives. Also the course content of these electives is too traditional**
  Several students expressed dissatisfaction with the fact that the designation of "technical electives" for the mechanical engineering courses is deceptive, since year in and year out the same courses are offered as electives and therefore they are de facto "required" courses, i.e. a student does not have a different choice unless they decide to take courses outside the mechanical engineering area such as in physics, electrical engineering, or computer engineering. Several students also pointed out that the content of the technical elective courses is very traditional, i.e. they do not address more recent and exciting technology developments. Dr. Ráez will take these comments to the ME curriculum committee so they can properly address them.

- **Will there be more laboratories and other resources available once the MSE program is fully implemented?**
  This question was raised by several students. Dr. Ráez and Dr. Voland acknowledged the fact that space for laboratories is currently very scarce but if the MSE program, as well as the Civil Engineering program, grow in student numbers; there is a commitment from IPFW to provide the necessary resources to support them. Dr. Ráez and Dr. Voland also mentioned that federal funding agencies, e.g. NSF, and local industry can be approached to provide stipends and scholarships for graduate students once the MSE program is approved.

- **The Co-op program has serious problems**
  Several problems with the Co-op program were brought up by a large number of students. Among the problems mentioned we have:
  - Students fill their application with the Co-op office and never hear back from them one way or another.
  - Because of this lack of response from the Co-op office many students have been forced to find by themselves a company that can provide them with the Co-op experience that they wanted. After doing so they have contacted the Co-op office and then gotten the proper paper work processed. Students were not happy to later find out that the Co-op office takes credit for having obtained Co-op assignments for them.
  - Local companies have contacted the Co-op office and not obtained proper guidance. In some cases the Co-op office has not returned phone calls.
  - Students who are currently on Co-op assignments reported that their companies have a negative impression of the IPFW Co-op office.
  - The site visits that the Co-op office carries out are, from the point of view of students, very short and limited to a few perfunctory questions and not much interest and time are given to what the students are actually doing.
  - Students would like the Co-op office to extend its reach outside northeast Indiana. In fact several students are doing Co-op duties or summer internships in companies outside Indiana. Students do not understand why the Purdue West Lafayette Co-op office can approach companies nationwide and the one at IPFW cannot.

  Both Dr. Ráez and Dr. Voland expressed surprise at finding out this high level of dissatisfaction with the Co-op office. This is particularly worrisome since all the students who raised these concerns are students in very good academic status and thus the concerns they raised cannot be related to their academic performance. Dr. Ráez and Dr. Voland will address this issue in the near future and solve it in one way or another. Students suggested that the department take total control of the Co-op program for the engineering students since currently it is not a large program (number of students) and thus it can be completely managed within the department.

- **Summer course offerings**
  Several students would like to see more courses offered in the summer. Dr. Ráez mentioned that as long as the enrollment is 10 or more any course can be offered. Unfortunately during the last two years only one course has reached that threshold. Students would also like to see the courses offered over the two sessions instead of compressing them into one session of five weeks. Dr. Ráez was not aware that many students liked this option. He will follow this suggestion and schedule courses over a ten week period (Summer I and II) rather than one five weeks. This mode will be available in the summer of 2007.