H. SUMMARY OF STUDENT SURVEY SUMMARY

April 29, 2005
Received: 47

Intended Degree: Bachelor of Science in Electrical Engineering (BSEE)
Expected Term & year received

Bachelor of Science in Computer Engineering (BSCEN)
Expected Term & year received

*Dual Degrees were counted on both BSEE & BSCEN

We will appreciate your response to the following questions to help us improve our program quality so that we could better meet our program objectives and outcomes.

Do you know our program educational objectives? 43(91%) YES 4(9%) NO
http://uwf.edu/ece/about/

2. Do you know our program outcomes? 43(91%) YES 4(9%) NO
http://uwf.edu/ece/about/

3. Do you know our course linkage to the program outcomes? 38(81%) YES 8(17%) NO
http://uwf.edu/ece/about/

4. Do you know our new requirement that a student must demonstrate each outcome achievement in at least two courses to satisfy the graduation requirements? 26(55%) YES 20(43%) NO
(See UWF 2004-2005 Catalog, Page 114)

5. Do you suggest any changes to our educational objectives? 2(4%) YES 41(87%) NO
If YES, what?
• More computers in the lab, updated computers that is.

6. Do you suggest any changes to our program outcomes? 27(57%) YES 41(87%) NO
If YES, what?
• Offer a practical exam courses (CE) that will show a student to get their electrical engineering certificate in Florida.

7. Do you have any suggestions for improving our curriculum (courses, laboratories, computer facilities) so that we could better meet our objectives and outcomes? 27(57%) YES 16(34%) NO
If YES, what?
• The lab facilities should be made more readily available. At my old college (UCF) they implemented a system whereby labs were accessed by allowed students any time of day. Lab access was permitted using keycards to open the doors. Key-locking doors were activated by smart-card) or similar) are an extremely common technology these days. In such a degree as electrical engineering, where hands-on experiments are key to understanding, providing unlimited access to the labs is a necessity. I attend the FWB campus, therefore I will talk about implementing such an idea there. The current
location would have to be moved to another room, independent of the limited library hours. I would think that shouldn’t be a big deal. The new room will be available for access to allowed engineering students who have a valid lab key-card. The keycard will only work for students who are taking classes that would require lab access or have special permission from a professor. Specifically, each card will be activated at the beginning of the term. The key-card system will only authorize or unlock the door for currently active students. At UCF, if you were taking a course such as Circuits I with a lab, you would go to the main engineering office and obtain a card (if you didn’t already have one) and have your card activated. After the end of the semester the card will become inactive, until reactivated in another semester. Also, there should be certain exceptions available to allow for other engineering students to obtain a card and access to the labs. This approval process can be implemented with forms by professors, advisors, etc. I currently work full time and attend UWF pursuing an EE degree. I do not always have the opportunities to get in the lab at the current limited hours. Therefore I am limited in my educational pursuits of electrical engineering. I am certain I am not the only one who would greatly benefit from this. Like I said, this implementation is common and should not be a major task to implement. Therefore, I suggest a change be made to allow for such laboratory access by students.

- Many of the mechanical units and analog boards in linear controls lab are defective. The equipment needs to be replaced/upgraded. The other labs need to have the oscilloscopes, ware tech, etc. calibrated.
- Better lab equipment. Perhaps test each equipment periodically to make sure they work. Malfunctioning equipment are not conducive to learning.
- Courses on the National Elective codes and Computer Aided Drafting need to be available for students.
- New equipment, calibration/maintenance of existing equipment
- Same professor for labs and classes
- Offer more courses a night, especially at the FWB campus
- New or upgraded equipment, having specific parts available, and more computers available in the students computer lab would increase our performance in lab experiments.
- Better equipment and facilities for supporting more advanced labs because most of the EE labs seem like busy work. Better support and facilities for senior design goals and completion of projects.
- Instructors that teach a course with lab should teach both the lecture and the lab. This will prevent any confusion caused by the lecture and lab not being in sync.
- We need a larger study room. I understand that we are trying to get a new building, but we can work with the EET department to share classroom space, or turn the machine shop into a study hall. The “blue room” is too small to study in.
- I would recommend adding 24hr access to the FWB campus laboratory for EE students.
- Remove or modify STA4321. I do not believe that I received much practical applicable use from the Statistics course. Remove EEL4313 from the required courses. After taking Calculus I,II,III, and differential equations, most students should have sufficient mathematical skills. Have Matlab/MathCad/OrCad elective course.
- I propose that we implement recitation classes here at UWF. In my technical writing class I have constructed a proposal that I would like to present to Dr. Cavanaugh about the recitation class. I was also wondering would you mind filling out a survey regarding your opinions of the recitation class.
- I believe, technical writing should be taught along with ethics or some other course to
help remove some of the course load on students. Also, every lab course should be restricted to reduce senseless workload on students. Students spend far too much time with lab reports than they should be expected to. The laboratory should be provided for its own benefit. Student’s have six Gordon Rule courses they must take before they ever get to the Engineering department, if they don’t know how to write by then, they shouldn’t be in the department. A few lab reports per course, especially in the upper level courses would be plenty.

- You should allow the lab to open for the same hours that the library is.
- Collaborate with the computer science department on the computer classes required for computer engineering majors. There is duplication of material in several courses. Also, provide computer science classes taught in C++ rather than Java because C++ is more useful in engineering.
- Provide a lab with basic equipment that is open 24-7
- The computers in the computer labs have been very problematic and slow in my experiences. Many of the classes using these resources do not have enough working computers to accommodate as many students as there are in the class. Newer computers would be nice, especially with USB 2.0 for memory stick accessibility.
- I think it would be beneficial to change instructors from teaching the same curriculum every semester. Right now, if during a course, I find that I disagree with the style of teaching the instructor is using, I have no options but to try and complete the course. Because I can’t withdraw and take the course at a later time with a different instructor that I can understand and feel I learn better from.
- Install AutoCad on your computers and incorporate it in the curriculum
- I’m a full time FWB student, so I can’t speak for the main campus, but the laboratories and computer facilities at the FWB campus I think are excellent.
- Your digital design and microprocessors lab curriculum should mirror Dr. Schwatz’s UF’s program while is far more challenging.
- I stated it above. More computers for the lab.
- More computers in lab.
- Improved instructors. Some instructors appear to be unconcerned with student education.
- Have a class about all the different software being used in the classes/labs (PSpice, LogicWorks, MathCAD, MatLab, etc.)
- Introduce an optional 1.0 credit hours introductory course to PSpice, MatLAB, MathCad, as these software programs are not adequately taught in the classroom.

8 Do you have any additional comments/suggestions for improvement concerning your undergraduate program or the Department of Electrical and Computer Engineering? 18(38%)
YES 28(60%) NO
If YES, what?
- I recently read the new proposed requirement of a Tablet PC to be implemented sometime later this year. I am extremely against this because I believe it will fail and will not improve academics, but rather hinder it. First, It is a known fact that a majority of college students have very little money. Requiring a student to purchase a Tablet PC to take certain courses is, bluntly put, a joke. I researched online the prices of Tablet PCs falling near the requirements detailed on the website and found the cheapest price to be roughly $1,500.00, with the average falling close to $2,000. This is an extremely expensive requirement to put on a college student. I work full time, and I myself would have a difficult time affording such a product. Most
students attending college just barely get by paying tuition and bills each semester. If required to purchase a Tablet PC of this price, I would find it impossible for most students to do. This is the main reason the idea will not work. The benefits listed that a Tablet PC would provide are very small. I understand that the Tablet PC would allow for students to more quickly have tests graded and homework turned in. There would be a nice immediate connections of data between student and professor. However, considering the types of course work performed in an engineering degree, I see the Tablet PC limiting educational freedom of thought. You cannot eliminate pen, pencil, and paper, and calculator from an engineering course. If I take a test, in Electronics I, for example, the material may cover problems involving solving the biasing of a transistor, or solving for the values of resistors to meet the requirements of an amplifier design. These types of problems always require lots of math work and calculation. Many students use extra sheets of paper to work such problems. On a Tablet PC, you can’t work as fast as on pieces of paper. And handwriting will be worse, due to limitations of the tablet’s screen to reproduce exact pen strokes. Also, using a Tablet PC for tests would force all tests to be “open book”. With a wireless internet connection built in, what prevents a student from browsing Google for answers on how to solve test problems? One can literally scan a full chapter of the textbook to a PDF file and browse it for aid on the test. To me, that defeats the purpose of a test. Another problem I see that may have an effect on test taking will be the maintenance of the computers. Many people are ignorant of internet spyware, adware, and viruses. If a student inadvertently obtains a virus or spyware on his/her table PC, then their use of their computer may be hindered, or disabled. If this occurs, one may be unable to take a test, or complete required Tablet PC work until the computer is fixed. In such an area of study as computer/electrical engineering, one must learn to perform complex analysis of systems using many forms of mathematics. Computer software, such as MathCad or PSpice, aid greatly in speeding up problem solving. But the core purpose of an education in engineering should be devoted to understanding how to independently solve such problems to gain as much valuable knowledge of the concepts as possible. Each step should be examined (or as many as possible). The best way to provide this understanding is by solving problems using a pencil and paper. If a student becomes dependent on their TI-calculator, MathCad, or a Tablet PC to solve all their engineering problems, then how can true, full understanding of such complex topics such as semiconductor devices, transistors, digital logic, filter design, power electronics, embedded systems, software design, etc., be fully gained? Such software tools do improve understanding and aid in problem solving, but it should never rid of the proven concept of problem solving on paper, especially in an educational environment, where the purpose is to learn. These are my thoughts on why the Tablet PC requirement should be removed. If I am required to purchase a Tablet PC to a course, I personally would be unable to take the course because of the money (tuition is already enough). And personally I would refuse to purchase a Tablet PC, because I strongly disagree with it being a benefit to an engineering degree.

- Classes seem to be geared in the Electrical department toward electronics. I would like to see more emphasis on power and practical motor operation. A class on CAD, PSpice, Matlab would make a good elective.
- Set up an individual course-completion plan for each student to where both the student and his/her advisor know their career progression and how to complete their degree.

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• Expand night course instruction, especially at the FWB campus. Add flexibility to and
   add more courses for students to choose from.
• Make sure computers are operational, 3 weeks ago in the DL room at FWB at least 4
   computers were broken
• Better communication with the students and public about how on-going research or
   competition projects. The goal being to spark interest and assistance from the
   community and upcoming students.
• All authorized elective courses should be counted toward the degree GPA, not just the
   EEL designated courses.
• There should be an agreement made with UF to allow for a degree minor, like
   Mathematics, since mathematical courses are acceptable as authorized electives.
• We need more Teaching Assistants in labs, better equipment, and better computers
• Wireless internet access at FWB campus. I would like to see a link in Argus, or some
   other platform that would indicate what classes you have taken and what classes
   you need for your specific degree. SASS is really vague.
• Stress to new students, through the Academic advisors or other means, the importance
   of taking the Microprocessor course as early as possible.

What if students have trouble purchasing the tablet PC’s due to financial situations?
Will there be any assistance for them?
• If students are being graded by outcomes as well as the standard method, they should
   receive periodic progress reports based on their achievement of outcome criteria. I
   only have 28 credits remaining after this semester, and I have no idea what
   outcomes I’m lacking. These outcomes are exactly the same as grade reports,
   whether ABET admits it or not, because they decide whether the student has
   demonstrated the required skills necessary for graduation. In the future, if the
   outcomes corresponding to a particular course are not met, the student should not
   pass the course, or not notified that some remediation is required.
• I think it would be beneficial to the students if more emphasis is paced on job
   placement and graduate school admissions. If the professors, especially those of
   higher level classes, could make announcements at the beginning of lecture about
   deadlines for applications, this is likely to aid the students in planning their future
   early and opening as many doors as possible. This will also reflect favorably upon
   the program as more students receive offers from more and more competitive
   institution/companies.
• When a student shows ambitions of learning a specialized skill, support him.
• The requirement that students after a certain date will be required to have a notebook
   computer is crazy. The department may not mind shelling out money for some
   teachers to have these computers, but it seems to me unless you folks are going to
   give them away, some people may be excluded from the program. I thought the idea
   was to grow the program. This doesn’t seem to be a very good way.
I think the new professors will be a huge improvement to the department. It is difficult
   to say without seeing them in action. Although, one complaint would be scheduling.
   It is demoralizing to know that I am forced to take certain classes in the spring, fall,
   and summer, along with knowing that many of these classes are taught only by one
   professor.
I am not happy with the distance learning system. I feel that if I am enrolled in the
   Pensacola section (I live on campus so I can be close to school), I should not have to
   take my classes over the distance learning. I understand students at FWB are at a
   disadvantage, but this disadvantage is the price of convenience. While I am a local
   resident, I have empathy for the student who does not live close enough to commute
to Pensacola and chooses to live on campus (like most traditional students would). It is not fair to these students who may to live on campus, to take their courses over the distance learning system. These students may as well be taking online courses from their own homes. In summary, I feel the distance learning program is a nice way to convenience a minority of students who do not wish to move or commute to Pensacola, but the direction the program is taking by seemingly splitting the faculty between two campuses over the distance learning is reducing its quality.