

University of South Florida
College of Engineering Advisory Board Meeting Minutes
October 18, 2013

Advisory Board members present: Chuck Black, Robert Garcia, John Bucher, Bill Bracken, Ed Copeland, Robert Andrew, Alicia Sullivan, Stan Newton, Joel Johnson, Frank Busot.

College of Engineering staff present: Rafael Perez, Beth Fontes, Major Alston, Ken Christensen, Janet Gillis.

Guests present: Shawn Brown, Justin Bowen

Meeting was called to order at 10:13 a.m. by Chairman Garcia

Robert Garcia asked Interim Dean **Rafael Perez** provided an update on the search for the new dean. The search committee has not completed the search yet.

Robert Garcia asked when they think this will happen. Rafael answered usually these searches take several months. The search committee will likely propose three candidates to send to the Provost, who will make the final decision. The difficult part of the process is getting the package together - funding for faculty, staff, etc. A top candidate will command a significant amount of funding.

Rafael discussed the engineering budget situation. USF is going through a three-year funding decrease mainly because of a decline in reserves which has administration very concerned. With budget cuts, USF is implementing a \$40 million reduction in the budget over the next three years. These numbers exclude USF Health. This year's reduction is \$10M.

Chuck Black asked what engineering budgets look like. Rafael responded that this year the college has a \$740,000 reduction in budget. This reduction has been achieved mainly by not hiring empty lines.

The college eliminated two positions, reduced financial support for CUTR, eliminated a position at nanotechnology and two unfilled faculty positions in CSE. The college is in OK shape for now. Two endowed chairs have not been filled in depts.

As part of the budget explanation, Rafael talked about the INTO program where overseas students are paying full out-of-state tuition. Last year, the college received \$250,000 in revenue from INTO. Engineering and business greatly benefit from INTO enrollment.

Robert Garcia asked if the cuts included eliminating adjunct professors. Rafael responded that there are no cutbacks there. Future cutbacks could include more funding to CUTR and other positions.

John Bucher asked if staff could take some courses that would make them more efficient. Rafael said the Resource Management Dept has been cut to the bare bones and that cutting staff has limited results budget-wise. The large costs are in faculty salaries. College provides support to the nanotech center of about \$300,000 and that may also be cut.

Chuck Black asked if budget cuts could this get to the point of reducing faculty. Rafael said President Genshaft doesn't want to cut faculty and she is more inclined to cut programs. The only way to reduce faculty is to cut out a program. Tenure is eliminated if the program is cut and the faculty will leave. But you must provide a teach-out for the students in the program so it takes a long time, about seven years, to see the savings.

Bill Bracken asked how research dollars factor into the budget. Rafael responded this money is mainly used to support grad students. Two thirds of the college's research funds and grants support PhDs. Engineering is the best in the university at doing this. This source of income, research expenditures, is something we rely on. New faculty need startup packages to support students, etc., and for the last several years we've used the research expenditures to provide that start up and we haven't been able to use it to offset expenses. With funding going down, we can figure that a new dean coming in and the package that he/she will get will bring new resources to the college.

Chuck Black asked that if the resources aren't there, will it prevent the hiring of the new dean. Rafael said yes that it could be a problem and he has agreed to serve for two years if that happens. STEM is a hot news topic and that gives the college a favorable position with more students coming in. The president is trying to get a cybersecurity center on campus. Administration wants the legislature to fund the center on campus and develop a degree program and in the event of that materializing the funding that comes with it will benefit the college.

Robert Garcia said that the ABET committee told the provost that USF has a funding problem in the engineering departments – they are underfunded.

Robert Garcia introduced new board member **Stan Newton** who gave a brief synopsis of himself.

Alicia Sullivan asked about the morale of the staff. Rafael said that the chairs report that it is good. Alicia asked if there is a flight risk from faculty. Rafael said that is always the case in engineering but they will have to go somewhere that isn't having budget problems and it is a national problem. Morale is fine but other colleges are reporting that they are having people leaving.

Robert Garcia asked about Lakeland campus status. Rafael said the IT faculty is moving in June to the third floor and the program is continuing as an online program. The college is having external reviewers review the program. The third-floor build out will cost \$1 million. The program must be accredited by ABET. We don't want an unaccredited program in the college

Stan Newton asked how many faculty are in the IT dept. Rafael answered 10.

John Bucher asked if they could be incorporated into the cyber security program and Rafael said yes. Rafael said when the decision came to move IT to the Tampa campus, faculty voted as other colleges wanted the program. But IT wanted to be in engineering.

Stan Newton asked if it is staying in Lakeland. Rafael said no, they are moving here but for now they are working on a teach-out. Rafael explained that USF Lakeland and the new Polytechnic University are two different state universities. Polytechnic will open in 2014 and if the faculty wants to, they might go there when it opens.

Rafael Perez gave a report on the ABET visit.

ABET visited in September and the college has been working toward this visit for three years. There was a mock visit in 2012.

On the last day the ABET team provided an exit report with a statement for every BS program. They only accredit UG programs. The report is divided into deficiencies and weaknesses in nine areas. It's like a pass / fail situation. The college was approved for six more year of accreditation which is the best you can have.

Joel Johnson asked if there was a concern about the accreditation. **Rafael** said that each criteria is fully measured by a very specific way using specific measuring tools. Students passing the class are not the measure so you must come up with the metrics and measurements. One of the concerns we got from the reviewers was one of the programs had an outcome that was using an indirect measure. It is too easy for a dept. not to care about the measure or not fix it. ABET really focused on measuring tool and that is a concern because some program around the United States have lost accreditation because of incorrect measurements. It can happen.

Robert Garcia described his participation on the mechanical board and how they tie that to accreditation. They are looking very closely at what students are doing five or seven year after graduation.

Joel noted that Harris is getting a lot of inquiries about employee performance.

Rafael explained that these are goal oriented program and these objective are verified by asking if they are meeting education requirements, pursuing lifelong learning as well as meeting the requirement of the job.

Three programs had a level of concern but that can be addressed at the next accreditation. Mechanical and CSE need more faculty per student and some outcomes in a third program we're not being measured correctly.

Rafael reminded everyone that a new dean will bring in the needed funding that will address ABET's funding concerns. ABET works in teams and everyone is in agreement before the team chair delivers the final report. All the ABET reviewers are PhDs and are volunteers.

John Bucher asked what the cost was and **Rafael** replied that it is about \$20,000 per program. Rafael added that it took two years just to prepare the ABET self-study.

Stan Newton asked if one program is deficient does it affect the other programs. **Rafael** said no but the university's SACS accreditation does affect the whole university.

Ed Copeland asked if the FL legislature will provide the funding that the ABET reviewers asked for.

John Bucher said that ABET provides the acid test that you are passing through a good program.

Bill Bracken said it goes beyond the research dollars and accreditation and licensure are the only remaining gateways to taking the PE exam. According to NCEES now you no longer need four years of experience under a PE to take the exam.

Joel Johnson said that Harris will not hire from unaccredited universities and that it is the only assurance they have that the student is prepared.

Justin Bowen and **Shawn Brown** presented the opportunity of the ASCE SE Student Conference in March 2014.

Justin described the components of the event. Shawn described how the board can help through judging, participating in the career fair and sponsorships.

Justin said every student pays \$55 fee set by ASCE constitution. They get money from student government but the percentages are very low. They will raise \$55,000 from entry fees but it costs \$100,000 to put on the conference.

The Board members toured the new **Design for X Laboratory** donated by the Harvey Kaylie Foundation (\$250,000).

12:00-12:30 Lunch Break

Robert Andrew chair of EAS discussed recent activities.

- He invited member to join the night parade for homecoming.
- The EAS has won an USF alumni award again this year. The top three alumni groups at USF are business, engineering and geology.
- Everyone is invited to the tailgate on Saturday before the game at CRA's vacant lot at the SE corner of Raymond James stadium.
- There is a Corporate Ambassador meeting on Oct. 29

- There is a get to know EAS event on Nov. 8 for young alumni and graduating seniors. It will be held at Lee Roy Selmon's on Boy Scout Rd.
- EAS has been supporting student for conference attendance this year and has budgeted \$15,000.
- EAS awarded four scholarships at Heart of Gold this year
- EAS's only fundraiser is Bullarney. They are looking for sponsors. This year Bullarney will kick off to the 50th anniversary of the college in 2014. If you are interested in attending or sponsoring let Bob Andrew know. It is a casino event.

Robert Garcia suggested we put Bullarney on President Genshaft's calendar now.

CSE Professor **Ken Christensen** presented a BEST program update.

The program focuses on interdisciplinary research and in its first year, there are four companies working on BEST projects. Ken said this is just the beginning and discussed many opportunities and future plans

John Bucher asked what the cost if the program is. **Ken** said \$25,000 and explained how the money is distributed.

Rafael asked Ken to describe a typical project. **Ken** used the Harris project as an example.

Frank Busot asked how students are recruited for the projects. **Ken** said the dept. recruit the best student.

Robert Garcia asked how many students were currently participating. **Ken** answered 26.

John Bucher asked how many credits do students get. **Ken** replied 3 for capstone, 3 for continued studies.

Ken will be recruiting for new projects in the spring so board member who are interested should contact him.

Rafael thanked the board members who are participating and asked for others to consider doing a project because it is valuable experience for the students.

Beth Fontes and **Major Alston** gave a development update.

- There will be an Unstoppable Campaign dinner on November 15. They handed out invitations for this \$250 per person event that will feature The Pointer Sisters.
- A new campaign will be put in place to raise and addition \$400m that will take the Unstoppable Campaign to \$1B.

Joel Johnson asked what the college did with the \$100M that was raised. Beth replied that a large amount of the total represented in kind gifts. The cash raised is typically raised for a specific purpose and can only be used for the intended purpose.

- Current solicitations from Google, Yahoo, Nielsen, and American Concrete Institute are awaiting confirmation
- Recent gifts include BEST projects, Raytheon, Chromalloy (an in-kind spectograph for the Nanotech center)
- Several scholarships were established recently – Agana, Cooley, Roberts, SAME

- Upcoming events: Homecoming NASA lecture and parade

Robert Garcia opened the discussion to proposed initiatives the board to present to the new dean.

Bill Bracken described a situation that he would like the board to support - The lack of FE and PE engineers in this area is causing companies to recruit from outside the local area. Locally there are enough PEs available for hire because of the large number of students enrolled in civil engineering. Bill said that on a national level 18% of engineering graduates will take the PE and the number one employer of engineers is non-engineering firms. Engineers are now going into fields that are covered by the industrial exemption because that product is covered by industry and product liability. NCEES is blaming academia for not promoting it because professors aren't PEs. This October (2013) is the last pencil and paper PE exam anywhere in the world. January starts the computer based test. NCEES develops and administer the exams and creates the model laws that the states use to incorporate into state laws. NCEES has no authority but does have influence. NCEES is working in China and have uncoupled the experience part from the exam requirements because Chinese engineers would not be able to fulfill that requirement. Bill would like to set up a committee to address the problem. He will send a note to board members looking for volunteers to form a committee. For CU credits FL requires 8 every two years. It will soon increase to 16 every two years with half of them in laws and rules. Bill offered to work with USF to do the laws and rules credits and look into online programs as well as look into charging for the certificates and let the university keep the money.

Robert Garcia said an A has been added to the STEM acronym making it STEAM. The A is for arts. There is a lot of confusion why an A had been added by the Florida Legislature. It is a legislator's pet project.

Rafael announced that the Research Foundation has seed program and applicants can apply for up to a \$50,000 loan. They want to invest \$25,000 per year to loan money for research projects.

Administration Relationship - How can the college build relationships with provost?

Ed Copeland suggested speaking with the trustees. We need to spend more time communicating with university leadership.

Joel Johnson suggested inviting Judy Genshaft to our events.

New Business

Bill Bracken would like the board to revisit the mission and objective of the board. Bill has taken his son to UCF and was impressed with the many corporate names on the buildings.

Robert Garcia suggested inviting people from patents and licensing to the next meeting.

John Bucher said that UCF has traditionally been easier to do business with he described the different philosophies of the UCF and USF incubators, namely over patent rights.

There was no further business.

Chairman Garcia adjourned the meeting at 2:31 p.m.

Respectfully submitted: Janet Gillis