Engineering and Computer Science Update
Dennis L. O’Neal, Ph.D., P.E.
Dean

ECS Board of Advocates
October 4, 2013

What we’ll will cover this morning

- Welcome new Board members
- Dean’s update
- Divide into task groups
  - Development/Corporate Relations
  - Undergraduate Program
- Report from two task groups

Four new people have been invited to join the Board of Advocates

- Douglas McBride
  President and CEO
  Morning Star Consultants
  Austin, TX
- Emile Sevadjian
  Technology Application Manager
  Halliburton
  Carrollton, TX
- Tom Gilman
  Engr. & HSE Deployment & Dev. Coordinator
  BP Exploration & Production
  Houston, TX
- Don Roberts
  Corporate Fellow
  Lockheed Martin Aeronautics Company
  Fort Worth, TX

Thanks to those of you on the Board who made the trip to Waco the first week of September to speak to our freshmen in EGR 1301
A brief update

• ECS milestones since our last meeting
• Academic Programs and planning for the future

The Teal Residential College is complete

Graduate program milestone
Dr. Winston Ewert, first Ph.D. from ECE and ECS!

ABET – We have continuing accreditation in our engineering programs until 2018!
Here’s what we had after ABET visited in October 2012

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Here’s the final outcome in July 2013

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Thanks to Michael Thompson, Bill Jordan, and Ben Kelley for their dedicated work to get the ABET weaknesses addressed!

First corporate named scholarship!

Thanks L3!
ECS broke 1000 students for the first time in its history!

Record number of undergrads!

Record number of freshmen this fall!

Record number of transfers!
ECS SAT scores continue to be well above the university average

Other noteworthy events
- Two faculty were tenured and promoted
  – Dr. Eunjee Song, Computer Science
  – Dr. Stephen McClain, Mechanical Engineering
- Drs. Booth (Baylor) and Ecklund (Colo. State) completed their Ph.Ds in May.
- Computer Science had another successful International Collegiate Programming Contest (ICPC) in St. Petersburg, Russia

More noteworthy events
- Largest STEM Career Fair in Baylor history!
  – 57 exhibitors (24% increase)
  – 676 students (93% increase)
- Sandia National Laboratories hosted six faculty from ECS in late July
- We continue to find ECS alumni in significant positions in companies
  – Tom Ayers, VP-Offshore Operations, Technip
  – David Buntin, VP, Econtrols, Inc.

We lost four engr. faculty since May
Dr. Robert Doty
Professor
Retired

Dr. Ben Song
Assistant Professor
Left for position at Argonne Nat'l Laboratory in Illinois

Dr. Deify Law
Lecturer
Left for faculty position at Fresno State

Dr. Russ Duren
Associate Professor
Retired and left for position with Raytheon in California
We gained four engr. faculty

Dr. Jordan Raney
Assistant Professor
Ph.D., California Institute of Technology

Dr. Keith Schubert
Associate Professor
Ph.D., UC Santa Barbara

Dr. Doug Smith
Associate Professor
Ph.D., University of Illinois

Dr. Scott Koziol
Assistant Professor
Ph.D., Georgia Institute of Technology

We filled the faculty position on the Kern Entrepreneurship Education Network (KEEN) grant

Mr. Larry Snyder
Clinical Professor

Larry will be working with faculty in ECS (Cindy Fry and Bill Jordan), development, and teach courses in entrepreneurship.

“The future starts today, not tomorrow.”
Pope John Paul II

“You will win success in whatever you adopt”
Panda Express fortune cookie

ECS Reunion Event

• December 6 and 7th
• Graduates from 1973, 1983, 1993, and 2003 are invited
• Friday evening dinner and ECS related tours on Saturday morning
• Last game in Floyd Casey Stadium on Saturday
ABET is coming again in Fall 2014!

- Computer Science program is up for reaccreditation
- Informatics program will seek accreditation for the first time

The rapid growth in ECS continues to challenge our ability to maintain the quality of our programs

- Larger classes, particularly at the lower division
- More crowded teaching laboratories
- Reduction in faculty/student interaction
- Student to faculty ratios comparable to some of the second tier state programs in the Big XII
- Insufficient support staff for size of program
- All three departments are being challenged with the growth

What’s our plans to deal with the growth?

- Faculty
- Staff
- Students
- Facilities

Our plan is to grow the faculty

- Hire more permanent faculty
  - We have 7 to 8 positions we will try to fill this year
    - 2 in CS
    - 2 in ECE (possibly 3)
    - 3 in ME
- Hire temporary faculty
  - Fill in the “holes” with adjuncts
We have two new staff positions

- IT support position
  - Will support the growth in IT requirements from faculty and students
- Undergraduate advisor
  - Will support advising of freshmen and sophomores in all programs
  - Will give us two full-time professional advisors
  - Will relieve faculty of advising lower division students

Plans to deal with the growth of students

- Aggressively manage future freshmen admissions
  - Fall 2014 – For pre-engineering
    - Minimum SAT of 1110
    - Corresponds to ACT of 24
  - Fall 2015 – studying raising minimum SAT requirements for pre-engineering
- Raise minimum GPA requirements for transfer students to 3.0
- Better advising will get students into other majors before they damage their grade point averages

We won’t get any significant space relief for another three years

- New business school building won’t be complete until Fall 2015
- Will take another year to renovate space to accommodate departments moving into Hankamer and Cashion Buildings
- Mechanical Engineering will likely stay in the Rogers Building
- Added challenge if chemical engineering program is started

We will be expanding our Ph.D. programs

- ME proposal was just approved by the Dean’s Council and Graduate Council
  - Will be considered at the October Board of Regents meeting
  - If approved, will have first Ph.D. students in ME in the fall of 2014
- CS just submitted their proposal
Structure of rest of the morning

• Two task groups (9:10-11 a.m.)
  – Development & corporate relations (Library)
  – Undergraduate programs (Classroom)
• Each task group needs someone to take notes during the meetings
• Each task group will report back to the Board before lunch