

**ECE IAB Meeting Minutes
Friday November 20, 2015**

Members In Attendance:

Dr. Nana Ampah
Mr. Andre Craft
Mrs. Shirley M. Holland-Hunt
Mr. Gerald Miles
Mr. Saint St. Julian

Faculty in Attendance:

Dr. Pamela Obiomon
Dr. John Attia
Dr. Xiangfang Li
Dr. Warsame Ali
Dr. LiJun Qian
Dr. Kelvin Kirby
Dr. Siew Koay
Dr. Richard Wilkins
Dr. Justin Foreman

Call to order

- Meeting was called to order @ 9:00am by Dr. Obiomon
- Welcome to everyone
- Minutes from previous meeting were approved

Introductions: IAB members, faculty, staff

Dean's Opening Remarks (9:15am – 9:45am):

- Thanks for coming and welcome
- College of Engineering now largest College at university-1486 students
- President wants to see enrollment growth go from 8300 to 9500
Future goal 2500 students x 2025
- Control the things you can control
- 5 Bldgs → buildings can hold 2500 students
Focus: graduate and transfer students: alliances being formed w/ community colleges, companies that need our expertise and skill sets, IAB members allies/friends, student skills
- Average growth: has been 6% since 2007
- Topics Discussed:
 - Growth strategies
 - Research: doing well:
 - Our portfolio is growing: Attia, Qian received Chancellors' Research Initiative
Out of the 5 CRI's provided to PV: COE received 3 of them
Dr. Qian: Air Force Big Data Center
Dr. Attia : Smart Grid
Dr. Koay: Cyber Security
 - University as a whole is looking up
 - The health of the College is well

Discussion:

- St. Julian asked Dean to elaborate on Cyber Security
- Dean's response
 - There's a very broad prospective including Engineering applications such as Tolliver's police probe; invention to catch Bio Agents; nuclear agents; explosives, encrypted messages, BIG Data security; Computer & Internet Security and Telecommunications

Department News:

- Jimmie Finister and Mr. Robert Prather spoke to ECE students
- Ali and Sadiku co-authored book
- Sadiku authored number one Circuits book in the world-he has authored approximately 60 books
- 2 students took 1st place at Doctoral Student Award
 - Ashley Kelsey
 - Samuel Bamgbose
- Senior Design Group
 - NAVSEA (San Diego) continuing project
 - Vehicle underwater-15ft
- Center of Excellence in Research and Education for Big Military Data
 - Dr. Qian advised that he could use input regarding:
 - Identifying industries specific need for big data
 - How can big data help businesses make connections?
 - How can big data analysis benefit your company tutorials?
 - Dr. Qian will be attending the Geo Tech Big Hub Meeting

University Enrollment

- Seeking input to reach President's enrollment goal: Increase to 9500 students
- 46 students are needed to meet 355 department students by Fall 2016

ABET Changes to Electrical Engineering Program Objectives

- April 2015 pre-ABET evaluation
- May 2015 we were pre- evaluated
- Dr. Attia ABET Evaluator
 - Suggestion by ABET pre-evaluators:
 - Remove program objective #2
- * Vote was taken on proposed changes
- All 5 IAB members agreed

Student Outcomes

- Each program accesses outcomes same for EE as well as CE.
- Improved Outcome E:
 - Net Theory I – improvements likely due to resuscitation course and working more problems, focusing on the fundamentals
- Dr. Li suggested regarding the Logic Circuits Lab:
 - Give to students early, collaborate, work together
- Dr. Attia
 - ELEG 2023 must still do work in these areas so that outcomes can go up
 - Logic Circuits designed/ conducted
- Dr. Obiomon
 - 1st semester FPGA, there was a cleaning curve and lab development. Glitches worked out this semester
 - Built on Previous
- Dr. Li stated that students enjoy FPGA work. Should be much better going forward.
- Mr. Craft
 - For ABET, what determines what is scored or not?
 - Faculty develops access to assignments for this outcome
- **Curriculum Changes for CPEG**
- Courses: ELEG 1043, ELEG 2054, ELEG 2064
- Dr. Attia: If we assist freshmen 1st year, we retain more students
 - Dr. Koay: Discussion ensued regarding positives/negative of course changes
- Mr. St. Julian
 - What is the purpose of this change?
 - It benefits freshman to have first exposure to our course instead of Computer Science intro course. A Computer Engineering perspective would be offered to students and hopefully effect retention.
- Dr. Attia
 - Faculty must agree on content of course, this may change by next year
 - Changes will be implemented by Fall 2016
- Dr. Obiomon
 - Vote if Board agrees that we should move forward
 - Discussion ensued. The Board agreed that if this course (ELEG 2054) will close the gap between upper and lower level classes, they will go forward and approve
 - ELEG 2054, ELEG 2064
 - Still under discussion as Tech Elective
 - Considering this course close gap between upper & lower level classes

- Dr. Attia
 - Re: ELEG 2054 & ELEG 2064
 - Received coursework at 6 universities
 - 4 in Texas and 2 outside of Texas
 1. They each have: Comp Science I; Data Structures; and Computer Applications
- Kirby:
 - Students' thought process may not be ready for algorithms/ data structures, etc.
 - Idea: Develop technical elective with high level features; keep ELEG 2064 a Sophomore course and add another course at a higher level
- Attia: That can be done
- Gerald Miles:
 - I am Pro-Lab; inquired if the number of required credit hours decreased over the years.
 - Yes they have decreased
- Proposed curriculum changes will be forward to the College Curriculum committee.

Questions from the Chairman for board members to consider:

- What would those in attendance like to see the IAB board to do more of?
- What would faculty, staff, and students like to see from the IAB?
- What would the industry and professional partners like to see from IAB?

Next Meeting

- Spring 2016
 - Friday, April 29, 2016 (Changed to 4/22/2016)