

Academy of Electrical and Computer Engineering (AECE)
Minutes of Annual Business Meeting
Thursday, April 24, 2014

Members Attending:

Max Anderson	Dennis Leitterman	John Skain
Michael Apprill	Michael Lemanski	Keith Stanek
Richard Arnold	James Leonard	Paul Stigall
Eric Aschinger	David McNabb	George Tomazi
Michael Basler	J. Derald Morgan	Thomas Van Doren
Edward Bradley	Jack Morris	Roger Volk
Lloyd Brunkhorst	James Paunicka	David Wang
Michael Emanuel	David Raterman	Steve Watkins
Kelvin Erickson	Walter Reed	Ronald Willoughby
Mark Fehlig	Lester Roth	
Mike Herron	Neal Schaeffer	
Duane Highley	George Schindler	
Leonard Laskowski	Donald Shaw	

The annual Meeting of the Academy of Electrical and Computer Engineering was held Thursday, April 24, 2014 and called to order at 8:00 a.m. The meeting was held in the Comfort Suites Conference Center. President Roger Volk chaired the meeting.

Dr. Kelvin Erickson, Department Chair, welcomed the Academy members. Introductions were made.

Dr. Kurt Kosbar reported on behalf of the Scholarship Committee. He reported that the Academy awarded a total of eleven scholarships this year. Four scholarships were awarded from the endowed scholarship account. Each award was for \$1,300. The AECE Board approved awarding an additional \$800 from the operating budget so that all four students would receive \$1,500 awards. These scholarships are awarded to students who have completed a FASFA form (application for federal student financial aid) and have a combined household income of less than \$40k. The recipients were: Rebecca Curtis, Michael Fanger, Brooke Greathouse, and Anthony Wellnitz. Six scholarships were awarded from the non-endowed account for \$1,500 each. These scholarships are awarded to students based on need and academic performance (GPA of ≥ 3.25). The recipients were: Thomas Abbeg, Michael Bauer, Janell Branscum, Kyle Harper, Kyle Lundeen, and Dylan Yoder. One scholarship was awarded from the non-endowed account for \$4,000. This scholarship was awarded to an incoming freshman based on need and academic performance. The recipient was Fei Lin.

Jason Northern, Development Officer, provided a campus update. He reported that annual giving was up 34% from last year and alumni participation is stabilizing after a six-year decline. He also reminded everyone that Homecoming is scheduled for October 17-18, 2014. The Miner

Legend Luncheon will be held at noon on October 17th and the Bertelsemeyer Hall Dedication at 4:30 p.m. The Hasselman Alumni House is scheduled to be dedicated at St. Pat's 2015.

Fei Lin, scholarship recipient, then made a brief presentation to the Academy. Fei was born in Fuzhou, China and came to America in 2009. His family settled in St. Louis, MO. Fei chose S&T because it was a great engineering school and wasn't that far from home, but far enough. He enjoys video games, movies, watching television, and playing badminton and basketball. His future plans include finishing his BS degree in both Electrical Engineering and Computer Engineering and then attending graduate school.

Michael Bauer, scholarship recipient, also made a brief presentation to the Academy. Michael was born and raised in Topeka, KS. He enjoys movies, video games, disc golf, NCAA basketball, NCAA football and watching the NFL. Michael loved the small campus atmosphere and explains that that was one of the things that drew him to S&T. He was also impressed with the availability of scholarships to students. He began his studies in Nuclear Engineering but changed his program to Computer Engineering during his freshman year. He plans to graduate with his BS in Computer Engineering in spring 2015.

Dr. Egemen Cetinkaya, the newest computer engineering faculty member, then presented to the Academy. Dr. Cetinkaya received his BS from Uludag University, Turkey in 1999, MS from UMR in 2001, and his PhD from The University of Kansas in 2013. He has been an Assistant Professor with the ECE department since January 2014. He is currently working to form the Complex Networks and Systems research group at S&T. His current research interests include design and analysis of resilient networks, simulation of network architectures and protocols, graph theory and algorithms, and wireless and mobile networks. Dr. Cetinkaya's current and future instructional focuses are Network Centric Systems Reliability & Security, Trustworthy and Survivable Computer Networks, and Introduction to Computer Engineering.

Dr. Kelvin Erickson gave a department update. He reported that for fall 2013 the department had 410 undergraduate students (160 CpE, 250 EE, 36 MSU) and 248 graduate students (42 CpE, 206 EE, 31 Distant). Research expenditures totaled \$7.1M. The department had 26 faculty members, 5 assistant teaching professors, and 13 staff members.

Dr. Erickson reported on the numerous student awards from the last year:

- Our students won the HKN Outstanding Chapter Award
- Outstanding Student Poster Award – 2013 ASEE Midwest Conference – 2nd – Joseph Strathman and David C. Macke Jr. with Advisor, Steve Watkins
- 2014 IEEE – USA New Face of Engineering – Amy K. (Perrey) Jones, EE '08 Grad. Product Engineer at John Deere in Dubuque, IA.

The department has two new faculty members, Dr. Pourya Shamsi in electrical engineering and Dr. Egemen Cetinkaya in computer engineering. Faculty awards were given to: Dr. David Pommerenke (Faculty Research Award); Dr. Theresa Swift (Faculty Teaching Award); Dr. R. Joe Stanley (Outstanding Teaching Award); Dr. Kristen Donnell, Dr. Jun Fan, Dr. Jagannathan Sarangapani, Dr. Yiyu Shi and Dr. Chengshan Xiao (Teaching Commendation Award).

Dr. Erickson reported that renumbering the courses using a 4-digit system has been completed and will take effect in fall 2014. Also effective this fall there will now be a required Controls and Communications course (each with 1-hour lab) in the junior curriculum, and a new minor in Automations Engineering.

New initiatives include:

- Cooperative Program with MSU
 - Originate courses from MSU in Spring 2014
- Blended learning courses
 - Incorporate in-class and online content
 - Circuits II is established
 - Microcontrollers began in Summer 2013
- Sophomore-Level Labs
 - Searching for NTT faculty
- Controls Laboratory Equipment
 - New required controls lab
 - New motion control course/lab
 - \$140K total - \$70K from gifts
 - Have approached companies for funding
 - AECE can help

Dr. Steve Watkins, Associate Chair for EE Undergraduate Studies, made a presentation to the Academy regarding current curriculum and degree program updates. He explained the renumbering structure of the 3-digit course number to the new 4-digit course numbers. He highlighted some of the current and upcoming curriculum changes and reviewed the minor program, emphasis areas, honor program and co-op program.

Dr. Jagannathan Sarangapani, ECE Department Chair Search Committee Chair, briefed the Academy on the current search for the new department chair. He explained that the committee's responsibility was to solicit applications for the position and recommend finalists for consideration by the Provost and Chancellor. The search will be nationwide but open to internal candidates. The finalist shall be eligible for tenure and hold the rank of full professor. The committee will submit an unranked list of acceptable candidates to the Provost by April 28th. Dr. Derald Morgan, Academy member, served on the search committee and AECE President, Roger Volk and AECE Vice President, George Schindler both met with the candidates for dinner. It is assumed that the selected person will commence their duties as Department Chair on or about August 1st.

Roger Volk called the business meeting to order by welcoming the new inductees that were present.

Don Shaw made a motion to approve the minutes from the April 2013 meeting. Dennis Letterman seconded the motion. Motion carries.

Roger Volk explained the Treasurer's reports. Leonard Laskowski made a motion to accept the financial reports as prepared. John Skain seconded the motion. Motion carried.

Roger Volk gave a report for the Membership Committee on behalf of Mike Perry. He reported that seven new members would be inducted into the Academy this year and reminded everyone to send in their nominations for next year.

Roger Volk then presented the Nominations committee report on behalf of Jim Fricke. Roger asked for a vote by acclamation for Mike Emanuel and John Skain (3 year term) to fill the two vacant board seats, motion carried. He then asked for a vote by acclamation for David McNabb to fill the vacant Secretary/Treasurer (one year term) position, motion carried.

George Schindler gave an overview of the Chancellor's Academy Presidents Forum. He highlighted the topics covered and emphasized what an important position this forum puts the Academy in.

Roger Volk then reviewed the endowed scholarship accounts that the Academy holds.

George Schindler gave a brief overview of meeting expenses. He explained that meeting expenses generally exceed revenue by an average of \$1,800 per year which is taken from the general operating revenue. He explained that the board had discussed ways of closing this gap. Some of the possibilities include: charging more, reducing the number of complimentary meals, or offering the membership the opportunity to sponsor a student or inductee. The membership discussed these and decided that all could be implemented as needed.

Roger Volk then addressed the Academy in regards to the future of the Academy. He explained that contributions vary each year and to address this issue the Academy established the current endowed scholarships. He then explained that the intent of the current endowment was to be able to fund eight scholarships at \$1,500 each. Once they reach this level the membership will need to make a decision as to whether to fund additional scholarships or increase the amount given. Roger made the motion to continue to provide students with the same level of scholarship funding. James Leonard seconded the motion. Motion carried.

He then spoke about the need of lab upgrades and how this has been needed for years and was one of the things that the Chairmen candidates even suggested. The state currently has matching funds available for labs. The board would like the membership to consider beginning to set aside funds for a lab endowment. Minimum funds to begin an endowment are \$25,000. The spending of the endowment account would be in the control of the Academy.

Roger then spoke to the membership about annual giving. He reported that over the last seven years the average gift made to the Academy was \$500, but that a very small portion of the membership donated regularly. The board has discussed the possibility of sending out a notice to the entire membership asking for \$500 annually. The letter would explain all the things the Academy was currently doing and would explain what they would use the funds for. The membership agreed that this would be a good thing and suggested allowing the donor to notate specific uses for the funds and to allow the donor to select from a range of donation amounts.

Roger presented the proposed budget for the 2014-2015 operating year. Donald Shaw made a motion to accept the budget as presented. Leonard Laskowski seconded the motion. Motion carried.

Roger reported that the next meeting of the AECE would take place on Thursday, April 16th, 2015.

Dr. Pourya Shamsi, the newest electrical engineering faculty member, then presented to the Academy. Dr. Shamsi received his BS from the University of Tehran, Iran in 2007, his MS at the University of Texas at Arlington, TX in 2010, and his PhD at the University of Texas-Dallas in 2012. His research interests include applications of power electronics, applications of power electronics in microgrids, and uncertainty engineering. His current instructional focuses are Power Systems Analysis and Design and Advanced Theory of Electrical Machines.

The Academy members then heard a presentation by members of the Robotics Design Team. The team is currently working to finish the robot for competition in Michigan at the end of May. Members from the Mechanical Division, Electrical Division and Computer Science Division all gave brief overviews of what each were doing to prepare the new robot. The team plans to work hard over the summer to streamline their process and begin working on a new robot for next year.

Roger Volk presented the Academy with the opportunity to fund two new display cases for the department. Some of the faculty have been cleaning out labs and ran across quite a bit of old equipment. They thought it would be nice to display it in the hallway of the department. Leonard Laskowski made the motion to fund the two display cases. David Wang seconded the motion. Motion Carried.

Ron Willoughby made the motion to adjourn the meeting at 3:30 p.m. David Wang seconded the motion. Motion carried.

Minutes submitted by David McNabb

May 1, 2014

The next AECE Meeting and Banquet of the Academy of Electrical and Computer Engineering will be Thursday, April 16, 2015. Mark your calendars and plan to attend.