

Academy of Electrical and Computer Engineering (AECE)
Minutes of Annual Business Meeting
Thursday, April 16, 2009

Attendees:

Max Anderson	Lloyd Brunkhorst	Richard Eimer	Kelvin Erickson
Jim Fricke	Greg Harris	Duane Highley	William Hord
Leonard Laskowski	Dennis Leitnerman	James Leonard	Sandra Martin
David McNabb	George McPherson	Russell (Joe) Monie	Charles Naslund
Michael Perry	Walter Reed	Neal Schaeffer	George Schindler
David Sizemore	Keith Stanek	Paul Stigall	Thomas Sweeney
Cynthia Tang	Thomas Van Doren	Roger Volk	Cheryl Walker
Ronald Willoughby	Ralph Wolfram		

The annual Meeting of the Academy of Electrical and Computer Engineering was held Thursday, April 16 and called to order at 8:00 a.m. in the Faculty Lounge located at Emerson Electric Company Hall. President Walter Reed chaired the meeting.

Department Chair, Dr. Kelvin Erickson, welcomed the Academy members and then turned the meeting over to Walter Reed.

Dr. Kurt Kosbar reported that the Academy awarded a total of eight scholarships this year for \$1,500 each. Matthew Ryan Overmire, Krystal Marie Thomason, Nicholas Adam Thomson, and Aaron Whade Williams received the endowed scholarship. Jordan Michael Henry, Jeffrey Michael Hill, Amanda Kay Luellen, and Kam Kit Yiu received scholarships from the original Academy fund.

Dr. Kosbar reported that the plan to award the endowed scholarship to the end of his/her student years has not worked. Some of the original students who were awarded scholarships via the “endowed scholarship” did not submit the required paperwork to prove that the adjusted gross income is less than or equal to \$40,000 a year, so the names that are awarded the “endowed” scholarship will probably change often.

The Academy can still grant scholarships to sophomores, juniors or seniors through the regular Academy account.

Greg Harris, Development Officer, reported that the campus has a new welcome monument at the I-44 University Drive Exit.

State appropriations are playing a declining role in the S&T budget, down from 50% in 2000 to 27% in 2009. Tuition is now 35%. Missouri now ranks 47th in the nation in per capita funding for higher education. Scholarships are critical as 1/3 of our students are from families with household income of \$40,000 or less and 1/3 are first generation college students.

S&T has completed accreditation visits from both ABET for our 16 engineering programs and the North Central Association of Higher Learning Commission. Both visits were positive. Past accreditation concerns were declining enrollment, time-to-degree patterns, consolidation of departments and colleges, administrative plans and diversity. Those concerns have all been addressed. Today, the concern is growing student/faculty ratios. The campus has increased from 4,987 students in 1998 to 6,371 students in 2008 with the same number of faculty. Minority student enrollment has grown by 74%. Female enrollment has grown by 35%. Non-engineering majors have grown by over 40%. The fall freshman class is projected to be 54% larger than the freshman class of 2000.

Toyota recently named S&T as one of only six key schools in the US. The Mechanical & Aerospace Engineering Complex (Toomey Hall) will be fully completed for fall 2009 as will an expanded fitness facility. Plans are still being made for the Innovation (Research) Park. The S&T Explosives Engineering program was on the Discovery Channel for "The Detonators". Astronaut Sandra Magnus BS Physics '86, MSEE '90 recently completed a four month stint at the International Space Station.

Nicholas Thomson received a scholarship for \$1,500. Nicholas chose both electrical and computer engineering as majors. Most of his family members are electricians. His favorite gift was an electronic experimenter's kit at age 12. Learning is his favorite hobby. His first job was inline hockey scorekeeper. He has worked as a temporary assembly line worker building Dodge Ram trucks in Fenton, Missouri and has had an engineering coop at Regal-Beloit. Nicholas favorite class is electromagnetics. He would like to continue his studies here at S&T to earn a MS followed by a Ph.D.

Krystal Thomason received a scholarship for \$1,500. Krystal grew up in Rockaway Beach, MO and is the first generation college student in her family. Krystal thought her emphasis was in Math then changed to undecided engineering. She explored ceramic engineering and finally decided on computer engineering as her major. She likes to cook and to crochet. Krystal plans to become involved with department activities next semester.

Aaron Williams received a scholarship for \$1,500. Originally, Aaron declared civil engineering as his major. He enjoyed electronics and computers more than bridges so switched to electrical and computer engineering to receive a dual degree. Aaron has worked with BorgWarner in the summer of 2007 and 2008. He is most interested in microcontrollers and likes power systems. His senior design project was a wireless aircraft telemetry system to be used on aircraft or missile. Aaron plans on securing a job after graduation perhaps to return to school for a MBA or a MS in engineering.

Matthew Overmire received a scholarship for \$1,500. Matthew grew up on a farm in northwest Iowa, but really was interested in computers and how they work. Matthew started his college experience at the Gateway College of Evangelism. He also attended UMSL and Washington University before transferring to S&T. He has secured a summer internship with Ericsson US: RF Engineer. After graduation Matthew wants to return to graduate school. Long-term plans include starting a business and working in real estate & urban renewal projects, because he is very interested in urban development and renewal.

Dr. Erickson gave a report on the update of the department. Fiscal year 2008 research expenditures were \$3.8M. The department had 377 undergraduate students (120 Computer Engineering & 257 Electrical Engineering) and 164 graduate students (40 Computer engineering & 124 Electrical Engineering) for fall 2008. The department has 32 faculty, 3 lecturers, and 15 staff.

Electrical and Computer Engineering students are down as expected. The nationwide trend is for students to major in mechanic engineering over electrical engineering. The department is still the second largest department on campus. The department has been brainstorming on ways to reverse the trend.

Students from our department have won the HKN Outstanding Chapter Award. This is the fifth year our students have won this award. Students received second place in the 2008 UAV Competition. David Erdos and Amy Perrey won the William C. Everitt Student Award.

The department welcomed Dr. Maciej Zawodniok our newest computer engineering faculty member.

The department has 12 professors, 11 associate professors, 8 assistant professor, and 3.25 Lecturer/Research Assistant Professors. Our department has the largest number of endowed professors. We have 6 distinguished professors.

Faculty Excellence Awards were given to Drs. Beetner, Venayagamoorthy and Zheng. Outstanding Teaching Awards were given to Drs. Choi, Crow, Kosbar, Moss, and Zoughi. Teaching Commendation Awards were given to Drs. Erickson, Fan, Ferdowsi, Pommerenke, and Hai Xiao.

Dr. Jun Fan and Dr. Jonathan Kimball each were awarded a Missouri Research Board Grant. This grant helps the newer faculty establish research.

The department expects the official ABET accreditation notice in July. The department does not expect any surprises.

The ECE Strategic Plan includes:

- Striving to be top 25 in national ranking
- Find funds to start: endowed teaching chair in circuits and computer engineering, endowment for laboratory equipment, senior design endowment and find funds to support three (3) teams not in the Student Design Center.
- Increase undergraduate enrollment by 20%
- Increase graduate enrollment by 25%
- Create BS on-line courses
- Support bioinformatics and bioelectronics
- Broaden graduate certificate programs
- Increase scholarship/fellowship endowment for undergraduate and graduate students
- Expand research reputation
- Find funding for building addition

Academy President Walter Reed opened the afternoon business meeting.

Jim Leonard presented Dave Erdos (former Academy scholarship recipient) a plaque as the winner of the 2009 AESS President's Achievement Award.

Jordan Henry received a \$1,500 scholarship. Jordan is first generation to attend college. Jordan liked S&T's small class sizes and our reputable engineering programs. He first declared mechanic engineering as his major and changed to electrical engineering his sophomore year. He knew that EE was the correct choice after studying Circuits I. Jordan has work experience designing and inspecting fire sprinkler systems, network operations, and a tool design project. He will work at Burns and McDonnell as a graduate intern this summer. Jordan's primary interests are power systems and communications. He would like to obtain his masters in electrical engineering and later a MBA and start his own business.

Walter Reed introduced our new inductees that were able to attend the business meeting.

Dennis Lettermann moved to approve both the minutes and budget for April 2008. Roger Volk seconded the motion. Motion carried.

Dennis Lettermann explained and discussed the endowed scholarship budget, the original Academy budget for March 1, 2008 through February 28, 2009. He also discussed the original Academy proposed budget for fiscal 2010. Dennis Lettermann moved to approve all budgets. Richard Eimer seconded the motion. Motion carried.

George Schlinder, Chair of Membership Committee, announced that this is Walter Reed's last year as President. Richard Eimer will be the new President. Dennis Lettermann will be the new Vice-President. Their terms will expire in 2011.

Leonard Laskowski moved to nominate Roger Volk to the position of Secretary/Treasurer with his term to expire in 2011. Richard Eimer seconded the motion. Motion carried.

Dennis Lettermann moved to re-nominate George Schindler to another 3-year term on the Board of Directors with his term to expire in 2012. Richard Eimer seconded the motion. Motion carried.

Kelvin Erickson moved to nominate Michael Perry to a 3-year term on the Board of Directors with his term to expire in 2012. Ronald Willoughby seconded the motion. Motion carried.

Darrel Mank resigned as Chair for the Nomination Committee. David Sizemore nominated Jim Fricke, Lloyd Brunkhorst and Thomas Sweeney to the Nomination Committee with Jim Fricke acting as Chair. Paul Stigall seconded the motion. Motion carried.

George Schindler agreed to chair the Membership Committee again. George Schindler moved to include Ronald Willoughby and Duane Highley on this committee with him. Dennis Lettermann seconded the motion. Motion carried. George thanked everyone for their nominations and reminded members to submit new nominees to be considered for the April 2010 induction.

Walter Reed reported that the last meeting of the Chancellor's Academy Presidents Forum was October 2008. The members discussed putting more information on the department web pages for the Academy such as: bios, names of scholarship recipients, by-laws, etc. All agreed that the information posted on our Academy is lacking. Sandy will try to start this project this summer.

Dennis Leitnerman moved that next year's Academy business meeting and banquet be held on Thursday, April 22, 2010. OGS weekend is April 23 through 25, 2010. Richard Eimer seconded the motion. Motion carried.

Dr. Maciej Zawodniok gave the Academy members a presentation. Dr. Zawodniok is the department's newest faculty member for computer engineering. He is from Poland where he earned his M.S. in computer science. Dr. Zawodniok worked in industry for 4 years in Poland before deciding to pursue his Ph.D. in computer engineering here at S&T. After earning his Ph.D. he worked as a post doc fellow under Dr. Sarangapani. His areas of interest are embedded systems for cyber infrastructure, wireless sensor and ad hoc networks and general wireless communication systems including radio frequency identification (RFID).

Dr. Erickson asked the Academy for feedback on the proposal that our undergraduate students be required to not only take the FE exam to earn their diploma, but also pass this exam. Pros and cons were discussed.

Dennis Leitnerman moved that the meeting be adjourned at 3:40 p.m. Leonard Laskowski seconded the motion. Motion carried.

The next Board Meeting and Banquet of the Academy of Electrical and Computer Engineering will be Thursday, April 22, 2010. Mark your calendars and plan to attend.