

Academy of Electrical and Computer Engineering (AECE)
Minutes of Annual Business Meeting
Thursday, April 09, 2026

Members Attending:

Eric Aschinger	John Skain
Ryan Bales	Roger Volk
Michael Basler	Steve Watkins
Edward Bradley	Ronald Wiloughby
Cameron Coursey	Jonathan Kimball*
Thomas Dalton	Katie Franks*
Daniel Dziedzic	Joni Matlock*
Alan Erickson	
Kelvin Erickson	
Timothy Hagan	
David Hilt	
Ron Kochanowicz	
Warren Kohm	
Leonard Laskowski	
Dennis Leitterman	
Dale Morse	
Mark Nealon	
Ken Owens	
James Paunicka	
H. Ward Silver	

* - non-members attending on behalf of the department

The annual meeting of the Academy of Electrical and Computer Engineering was held Thursday, April 09, 2026, and called to order at 8:00 a.m. The meeting was held in the Diamond Event Center. President Jim Paunicka chaired the meeting.

Dr. Jonathan Kimball, Department Chair, welcomed the Academy members. Participant introductions were made. He then provided an update of the department. He reported that both Dr. Levent Acar and Dr. Ali Hurson retired in 2025. He also reported that three faculty were hired, both Dr. Jakob DeLong and Dr. Shruti Pandey assistant teaching professors and Dr. Feng Zhao, a professor in the Semiconductor Engineering Program all joined in August '25. Current enrollment numbers are down slightly, but the numbers for incoming freshman enrollment in Fall 2025 are up.

Dr. Minsu Choi reported on behalf of the Scholarship Committee. This is his second year as the scholarship coordinator following the retirement of Dr. Kurt Kosbar at the end of 2023. Dr. Choi reported that there was a total of \$125,120 awarded to students in the 2024/2025 academic year from the Academy. Awards were given by five different Academy accounts and assisted 34 different students. The recipients were: Patrick Smith, Victor Dedert, Heath Lungstrum, Christopher Richardson, Sunmanjit Dayal, Geoffrey Alva, Luke Goodman, Abigayle Baggett, Kelvin Mobley, Xiaojie Wang, Edey Huckie, Logan Johnston, Olumide Akin-Deko, Dylan Torales-Berta, Adriel Osborne, Michael Davis, Jacob Morris, Seth Sievers, Jackson Unger, Carson Williams, Jorge Noriega-Pereira, Benjamin Cuebas, Maya Vancardo, Justin Konieczny, Tyler Kilper, Jacob Byers, Carmen Gassaway, Katherine McNevin, Emma Bohannon, Joey Stecher, Jacob Benett, Justis Braden, Tyler Schelhammer, and Gabriel Riddle.

After Dr. Choi, we heard from Jason Northern at the Development Office. He discussed multiple ways philanthropy and partnership including The Miner Alumni Association, Giving, Donor Relations, Relationship Management, and Advancement Services. He talked about the different teams that are involved with each group mentioning Tory Verkamp, Lara Turek and Nancy Hatch in University Advancement as well as MaryLee Guthrie, Lisa Masters, himself, Michelle Shults and Molly Crowley. He also talked about where monetary donations go towards the university, Miner Giving Days, the Class of 1976, 50-year Golden Alumni Reunion, and the Order of the Golden Shillelagh meeting in Dallas, Texas. He gave everyone a list of upcoming events as well.

After Jason, we heard from the department's new Assistant Teaching Professor, Dr. Jacob DeLong. He introduced himself, noting his research interests as adaptive radar simulation and teaching improvement. In the past he's worked with adaptive spaceborne CPR and worked at UJ: Physics Pre-Assessment Predictive Capability. He talked about what he's currently working on which is developing new lectures and labs and updating existing courses such as EE 3320 and removing duplicates and replacing them with new EE 2410 courses. The goal of making these changes, he said, was so he can spend more time on applications.

After Dr. DeLong, we heard from another new faculty member, Dr. Feng Zhao, who is a professor in the department. He introduced himself noting his educational background, work experience, and research interests which include semiconductors, micro/nanoelectronics, sensors, and electronic materials. He talked about his research interests being wide bandgap, semiconductors, high power and high frequency devices. He also discussed MEMS, SPR, and nonmaterial based chemical and biomedical sensors. As well as Nonvolatile resistive switching random access memory and artificial synaptic devices for "brain-inspired" neuromorphic computing, and artificial intelligence. He closed his discussion by talking about Micro and Nanoelectronics and an Energy Laboratory.

After a short break we heard from the Multirotor Design Team. They opened their discussion with a short overview of their team, saying that every student in every major will have a place on their team, and be provided with the opportunity to grow through hands on design and manufacturing experience. Their current team consists of 148 total members, organized into 4 divisions (hardware, software, racing, business and marketing). They then broke down the team groups and talked about different jobs for each subgroup (ex: the hardware division's design, build, and test groups). They discussed the International Aerial Robotics Competition as well as the collegiate drone racing championship and current research projects (agricultural research, light show drones, and in-house manufacturing).

We then heard from scholarship recipient, Justin Konieczny. He gave a short introduction to himself and talked about his hometown (Dardenne Prairie, MO), he graduated from DeSmet Jesuit High School in Saint Louis. He graduated Spring of 2025 from Missouri S&T with a B.S in Electrical Engineering, and he's started the M.S program as an undergraduate through the accelerated program. His current progress is his M.S Thesis close range ellipse fitting for UAV autonomous landing (UAV control strategy based on major and minor axis, implemented using the Direct Least Squares Algorithm for low computational cost, and little prior research was done on ellipse-based control methods). He's expecting to graduate Summer of 2026. His future plans include being accepted into the Ph.D. program at Missouri S&T, continuing research with Dr. Watkins (optical sensing in composite materials), continuing involvement in lab courses and ECE research and projects, and pursuing a career in engineering research and development.

After Justin we heard from another scholarship recipient, Jayden Hicks. Jayden is currently working on a major in Computer Engineering and a minor in Business Administration and Computer Science. His professional experience includes being the founder and chief executive of Vahva, he's a career miner through COER, and he's a study abroad peer advisor through the S&T Study Abroad organization. Leadership experience includes being a past governor and current treasurer of residential commons hall association, present corporate outreach and sponsorship coordinator for the national society of black engineers, current president of future business leads of America, and being the co-founder and vice president of MST DECA. He has memberships in RCHA, NSBE, DECA, FBLA, Black Gems, and SHPE. Things he's done include studying abroad in Berlin, attending many Engineering Conferences, volunteering many times in the community, and starting his own company. His goals after graduation include continuing his business, getting his master's in business administration, and giving back to Missouri S&T.

We then heard from Dr. Mehdi Ferdowsi, Associate Dean for Research in CEC. He gave a brief update on the College of Engineering and Computing. He opened his discussion by

talking about 4, 600 undergraduates, 315 master's students, and 405 PhD students. There are currently 187 faculty members, 9 departments and 18 undergraduate programs. Leadership changes in the CEC include new department chairs for ChBE (fall 2025), CArEE (fall 2025), and MSE (Spring 2026). A new Associate dean for undergraduate education (Spring 2026). New interim chair in MEE starting (Fall 2026). And they're currently searching for an interim chair for MAE. He then discussed other units/programs in the CEC including, Student Design and Experiential Learning Center (SDELC) – Zach Tuhoski will be the new director, Global Engineering Program, and CEC student leadership program (LIFE) – Dr. Bayless will be the new director. He showed stats for Fall 2025 Undergraduate enrollments which included, first year retention rate 89%, 25% out of state students, 4% international students, 20% female students and enrollment in the CEC is up 9.2% since 2022. He discussed the outlook on FTC students for Fall 2026 being up a bit in deposits in mechanical, aerospace, nuclear, electrical, metallurgical, petroleum, and semiconductor engineering, way down in computer science (almost 50%), meaningfully down in Civil (25%) and CompE (20%), and the CEC is down -120 student deposits year-to-year. He discussed CEC expenditures and awards, expenditures by department, and USNWR graduate rankings (we are ahead of state flagships such as K. State, MU, Nebraska, Kentucky, Iowa, Oklahoma and OK state, Georgia, Alabama, S. Carolina and Arkansas). He discussed motivating factors and catalysts for the CEC's next chapter, mentioning that the world needs more engineers, demographics and consumer choices are creating "have and have not" situations in higher education, rapidly transforming technologies in energy, medicine, transportation, artificial intelligence, and demand innovation. The CEC's vision is to establish S&T engineering as a national brand by driving S&T forward through engineering, inspire student demand and growth, emerge as a powerhouse for innovation and partnerships, and become a top 50 engineering college. The CEC's initiatives for transformative education are Miner Ai and AI competencies in the CEC, global engineering and study abroad, project-based learning, KEEN teaching enhancements, LIFE program, SDELC integration through experiential learning, new academic programs, and new academic partnerships. Research innovation includes critical minerals tech hub, defense tech hub, Bioplex and Bioinnovation, Powerplex and Nuclear Energy, Geoplex and Geospatial Engineering. He concluded his discussion by discussing student demand and national branding which included PRO student videos, CEC student newsletter, Project Lead the Way efforts with emails, postcards, teacher workshops, etc., engineers explain everything podcast, and USNWR voters – annual reports and key updates.

The group then dispersed for lunch which was catered by Lee's Chicken.

After the lunch break, the group heard from three senior design teams. The first one was "Coil Consortium" which was presented by students, Amanda Dalton, Te Hawk Frey,

Nehemiah Milton, and Patrick Smith. They talked about their superior mobile coil gun which boasted promises of being swifter, sleeker and safer. Their motivation for a revised coil gun design was to use it as an educational tool. Their project goals were to improve charging speed, reduce weight, and implement safety features. They discussed user interface, power distribution housing, power distribution board, barrel and coil housing, boost converter, and control system – switching and sensing. They concluded their presentation by acknowledging those that provided additional assistance on their project (Dr. Woodley, Jerry Tichenor, Jeff Birt, Norma-Gene Cottrell, Dr. Kimball, and Dr. Shamsi). They also attempted to fire up their coil gun for a demonstration, but they were not successful.

The next group we heard from was Wieland PLC Factory Upgrade by Sydney Clark, Peter Huelsing, Jonathan Slama, Kaden Young, and Saif Shaffie. They discussed the client (Wieland Group, a manufacturing plant located in Cuba, Missouri), their goals and objectives (integrate industry standard software into an existing manufacturing process, reprogram and adjust different components in the process, and adhere to different constraints and provide updated documentation for the process). Their project overview consisted of operator interface improvements, program conversion and hardware improvements. They made updates to the company's HMI software for easy-to-teach to new operators. They then discussed their program conversion and wiring diagrams. They also discussed their "to-date accomplishments", project challenges, project takeaways and their remaining work for the project. They completed their discussion by acknowledging two faculty members that assisted them with their project (Dr. James Fond – Senior Design II advisor, and Dr. Kelvin Erickson – project advisor).

The last group they heard from was RoveSoPickNPlace by Jesse Deuel, Will Grove, Clayton Cowen, Rooper Ritzma, and Tim Lipina. They described their project as an automated Pick and Place machine, controlled by 6 stepper motors and DC vacuum pump motor, budget friendly, hobbyist and beginner friendly, computer vision for reliability, and desktop portable. During the presentation they discussed their motivation for the project, workflows, state machine, and overview of the block diagram, technical breakdown of the hardware, software stack, software GUI operation page, software GUI debug page, software vision, software flow control, and power and control PCB. They showed two different presentation videos (Gantry homing and picking and placing), discussed their technical progress, current progress, and future progress. They talked about their project development which included budget and teamwork. They concluded their presentation with lessons they learned from the project which included, ensure scope is reasonable given time and team resources, team accountability and communication is key for consistent progress, use team meetings for necessary integration work and delegate work

to be done individually outside of meetings, devcontainers are very useful, but sometimes a pain, and test fit small 3D printed parts before trying to print everything at once.

After the senior design presentations concluded, attendees heard a brief discussion from Dr. John Harris, Provost and Executive Vice Chancellor for Academic Affairs. He talked about campus updates and congratulated the academy for being the largest benefactor from all alumni groups on campus.

After hearing from the provost, academy President, James (Jim) Paunicka opened the official business meeting for the day. Members discussed the previous year's meeting minutes, and multiple changes were requested. Jim thanked everyone for making the trip to Rolla and thanked them for their generosity during the past year. He talked about his interactions with other Missouri S&T academies over the past year and talked about Academy Presidents virtual meetings which were used to share information.

Once Jim concluded his opening discussion, he opened the floor for Tom Dalton to give his Vice President's report. Tom talked about the previous night's panel discussion held at the ECE department in G31. He reported over 40 students attended the discussion. The panel consisted of Dale Morse, David Hilt, David Saunders, and Davide Sizemore. Pizza was brought in by Alex's Pizza Palace out of Rolla. Overall, it was a successful event.

After Tom, the group heard from Cameron Coursey about the membership committee. Updates made to the committee are a change in chair and new committee members, Dale Morse and Clay Merritt whose terms expire in 2028, as well as Don McIntosh and Larry Mueller whose terms expire in 2029. Ken Owens was also mentioned as the new advisory with a term expiring in 2029.

John Skain opened the next discussion as the chair of the nominations committee, where Clay declined to return to his position as committee member. John then discussed member terms endings of Sharon Beerman-Curtin, and it was determined she might continue in her role pending acceptance and would move forward in her position unless she says otherwise (she was not in attendance of the meeting). John's term was also ending as chair, and he offered to return as chair but opened the floor for nominations. It was discussed before the meeting and Dan Lumma agreed to take Clay's position as a committee member. There was a motion to accept Dan Lumma and John Skain's position within the committee and Roger Volk motioned while Ron Kochanowicz seconded the motion. John discussed the review process for 2027 membership nomination and requested future meeting packets include a list of all academy officers. He continued his presentation with an introduction to the 2026 inductees (Alan Bryant, Theresa Swift, Christopher Wolfgeher, Jacquelyn Nagel, James (Jim) Cale, Travis Dierks, and previous

years inductee Larry Mueller). Conclusion of the discussion were a recap of 2027's officers which are: Ken Owens moves from Secretary/Treasurer to Vice President, Tom Dalton moves from Vice President to President, Jim Paunicka moves from President to President-Emeritus, and the group is seeking new nominations for the Treasurer position.

The group then heard from the academy treasurer, Ken Owens. He discussed the budget actuals for March 2025 through February 2026 with a balance forward (as of 3/1/25) of \$25,816.85. The total income was \$52,417.23 leaving \$78,234.08 as the total for available funds. Expenditures for the year totaled to be \$12,799.73 leaving the ending balance (as of 2/28/26) at \$68,434.35. Ken then showcased the proposed the 2026/2027 budget which brings the previous year's balance forward (\$25,817), total projected income (\$32,500), and total income balance of \$58,317. There were multiple motions to adjust the proposed budget. The first one was to increase the Kummer inspiration from \$25,000 to \$27,000 to reach the full endowment commitment made by the Academy, the motion was moved by Len Laskowski and seconded by Dennis Leitterman; motion was passed. Roger Volk moved to transfer \$5,000 to lab endowment from the operating account and to increase the department chair fund to \$2,000 (from its original \$1,000) seconded by James Fricke and both passed. There was also a motion to move \$15,000 to the department scholarship fund from the operating account moved by Jim Fricke and seconded by Len Laskowski, the motion passed. The projected ending balance after expenditures (projected \$43,000) would be \$15,317. There was a motion to approve the proposed budget as an amended proposed budget by Ken Owens, moved by David Hilt and seconded by Alan Erickson; motion passed.

Dr. Joe Stanley and Dr. Kelvin Erickson then discussed undergraduate programs in the department, Computer Engineering and Electrical Engineering, respectively. They discussed curriculum changes that have been made since 2021 in both Computer and Electrical Engineering. They discussed the two programs' mission statements and program educational objectives which were last reviewed by the ECE Academy in 2025 and last reviewed by ECE faculty in 2020. Cameron Coursey suggested re-wording the last sentence of the mission statement. They discussed the program educational objectives for both Computer Engineering and Electrical Engineering. Mark Nealon suggested changing the wording to not be so assumptive, arguing every new engineer's experience is different.

Dr. Kimball then opened the floor for a lightning round before closing for the day. He asked for thoughts on the new location and attendees responded with pros and cons. One major con was that we were no longer near the hotel (or any hotels) but a major pro was the lighting and amount of space. Other comments in the lightning round included figuring out transportation for the spouse program, Mark Nealon suggested hearing from campus

development, Chris Wolfiger suggested hearing from division of student success, and Ward Silver suggested students create videos for their senior design presentations instead of live demonstrations. Other recommendations include having inductees introduce themselves during the meeting portion of the day, see more of Dr. Erickson talk about things going on in the department, the chairs at the event center need more padding, and the bar needs more alcohol selections. Other statements included a comment from David Sizemore, academy member and attorney, to consider end-of-life planning, as you think about support for the Academy. President, Jim Paunicka was impressed with student presentations, commenting the technical level is fantastic and the leadership that you allow students have been a great thing with a side comment that he thinks it's great the department allowed the students to design and build a coil gun. Jim also suggested finding a way to help students learn or understand about transitioning from students to professionals, commenting that when a student is in school, they are in a situation where the question is known, and the answer is known. After they graduate and are working, they don't even know the questions. Find a way to try to let students know that they will be faced with that. Jim also would like to hear from faculty on what is being done on the transformative education topic.

Jim made a motion to adjourn the meeting at 3:45pm and James Fricke seconded the motion, which carried.

Minutes submitted by:

The next Meeting and Banquet of the Academy of Electrical and Computer Engineering will be Thursday, April 22, 2027, at the Diamond Event Center. Please, mark your calendars and plan to attend.