Engineering and Physics
Business & Leadership Council (BLC)
May 2, 2025
12 noon, Zoom

I. Members present: Shannon Schneider, Square Engineering LLC; Jonathan Hartman, Burns & McDonnell; Jason Draper, Burns & McDonnell; Vanessa Miles, AC Engineering Professor; Dr. Van Herd, AC Engineering Professor; Dr. Van Domelen, AC Physics Professor; Colin Voiles, AC Instructor; Holly Hofmann; Director of HSI STEM Grant; Imelda Saavedra, Coordinator of External Partners, HSI STEM; Jennifer Johnson, Career Navigator, HSI STEM; Dr. Richard Hobbs, Chair of Physical Sciences; and Penelope Davies

II. Community Partner's Recommendations: Each participant reviewed their role in their engineering firm and at AC. Our community Partners recommended the following:

1. Need for an understanding of the fundamentals.
2. Basic skills for engineering.
3. Critical thinking skills.
4. Comfortable working in teams.
5. Familiarity with the basic design process,
6. Willingness to embrace AI to determine what will be invaluable for engineering and what might need to be further examined.
7. Introduce students to the various types of engineering: civil, mechanical, electrical, etc. to create an excitement for the possibilities of future careers.
8. Continue using SolidWorks, which will develop skills our engineering students may apply to any software used by engineering firms. SolidWorks will provide the skills that Fusion and CAD provide.

III. Work-Based Learning: Holly Hofmann reported that AC has a focus on work-based learning to provide our students with the Internships to experience engineering in the real world. AC provides Internships which can be embedded in a course as well as Internships at companies in which AC supports. Holly shared that Pantex participated in an Internship with an AC student between his Freshman and Sophomore year last summer. This experience was so beneficial for Pantex that Pantex is currently funding an Intern for this summer.

Holly asked if our students needed to have certain licenses to work as an Intern? Our community partners responded that a license would not be necessary. The engineering firms would have the licenses needed for our students. Our community partners did encourage a completion of Calculus I for our Interns. They also encouraged Job Shadowing as an opportunity for our students to experience engineering in the real world.

IV. Next Steps: The faculty and leadership will take our community partners recommendations and develop tools that will better prepare our students to meet their company needs. Our community partners were thanked for sharing their time and words of wisdom with us.

IV. Adjourn: There being no further business the meeting was adjourned at 1 pm.

Respectfully submitted. Date: 5-2-2025

Penelope Davies