

UMES EAC Meeting Summary

MEMORANDUM FOR Record

Subject: UMES EAC Meeting Summary

Purpose

To participate in the August 2021 Engineering ABET Planning Meeting and provide a summary of EAC organization, plans, and near term actions.

Agenda

- Status of EAC Chairmanship
- General EAC Strategy
- UMES Engineering Alumni Participation
- Local Industrial Participation
- Faculty Participation
- Document Archive and Access (Web Based)
- UMES Graduate Engineering Program and Regional Interest
- Other Industrial Advisory Committees

Summary of Discussions

- Wednesday, 25 August 2021. Dr. Stanfield attended the Department of Engineering and Aviation Sciences ABET Planning Meeting as a representative of the EAC (and as an adjunct faculty member) to update the department on EAC plans
- Dr. Stanfield accepted (volunteered) for the EAC chairmanship through the 2024 ABET assessment cycle
 - Recently began instructing again (Spring 2019)
 - Changed company which has opened a little time and company support for more UMES involvement
 - Will serve through the 2024 audit and then re-assess for the next cycle
- General Strategy
 - Plan for a conventional 25-30 member panel as in previous years
 - Membership to include broad local industrial base with emphasis on alumni in the work force, but other leaders as well
 - Will issue (re-issue) invitation to past members to serve on the EAC
 - Will invite new members from new groups (or existing groups) to serve
 - Will assess gaps and identify and invite other members as needed
 - Plan for one larger annual meeting (probably virtual), hopefully in October, but possibly later depending on readiness
 - This will be the corner stone meeting, but to be more responsive and interactive with the department, we have plans for monthly activity

- Planning towards some sort of monthly EAC action, survey, questionnaire, or notification to the EAC member organizations. This interaction will have one main focus area and seek timely EAC input or feedback
 - Short document with one simple question/topic area each month or so
 - Looking to faculty to provide these topic areas, which could include:
 - Skill sets needed in current and future employees
 - Perceived gaps in skill sets of recent graduates regardless of school
 - Technology trends that are impacting the work place
 - Writing, programming, and drawing skills across the curriculum
 - Opportunities for students in the local market
 - Other words of wisdom the Department can use to improve
 - Curriculum planning
 - General continuous process improvement
 - Focus areas for students (aside from academic matters)
- Plan for monthly interaction with the department through their regular staff meeting and any other ABET specific planning meetings, with EAC focus
 - Looking for actions the EAC can take to inform and improve
 - Adding topics to the EAC monthly surveys
- Participation in the EAC
 - Alumni network in the EAC panel
 - Locally employed alumni and more widely dispersed alumni
 - Active Students on the EAC Panel (two)
 - Local Industry (alumni members and interested leadership)
 - Entire Engineering Faculty (providing questions that industry might be able to answer)
- Document Archive and Access
 - Established an EAC webpage on the UMES E&AS website
 - Post the EAC Roster and General Information
 - Post the meeting documents and references (like this report)
 - Other news and information as relevant
 - Handy resource and objective evidence of activity for ABET surveillance audit teams
- Special UMES Graduate Engineering Program and Regional Interest
 - Engineering Department is planning, advocating, and coordinating about a graduate offering in Engineering
 - Department is considering whether a graduate program is course based, thesis based, or a hybrid curriculum. It is also considering capacity of current faculty, future faculty size, and spiral growth of the department. It is considering the types of graduate students the program will attract (what do they want/expect) from local engineering work force as part-

time, continuing education, non-traditional graduate students to traditional full-time graduate students. It is considering the Universities ambitions and desires for the program and where grant funding might be found and applied. Program must be a balance between what the institution can support and what the potential student base needs.

- EAC Chairman provided a point assessment of the local interest level based on personal experience and observation
 - This will be posted to the EAC website for reference
 - Demonstrate the approximate percentage of one work force population that might be interested in the UMES graduate study effort.
- Once up a running again, the EAC membership will be asked to assess graduate study interests, constraints, etc. of their companies and/or industries to help assess demand and need.
- Other Industrial Advisory Committees
 - Recent interaction with other HBCUs

EAC Topics of Investigation

- Industry processes that might benefit the Engineering Department process improvement efforts (which are already maturing on their own)
 - Lessons Learn (LL) Database and periodic feedb-forward cycles
 - “Non-Conformance Report” processes
 - Corrective Action/Preventative Action tracking systems
 - Leading Indicators of student and/or department processes
 - Objective Evidence of process definition and compliance
- Industry Feedback and Input on engineering graduates and early career employees from any institution
 - Skill sets needed in current and future employees
 - Perceived gaps in skill sets of recent graduates regardless of school
 - Technology trends that are impacting the work place
 - Writing, programming, and drawing skills across the curriculum
 - Opportunities for students in the local market
 - Graduate Study interest, needs, and obstacles
 - People, Planet, Profit considerations in industry and academics

Recommendations

- Dr. Stanfield to Chair the EAC again for the 2021-2024 period
- Engineering Faculty to provide topics of interest for EAC action or research
- Industry infusion into Department Staff Meetings (in the form of EAC chairman attendance in the short term, but other invited guest in the future perhaps)

Past Actions Status

- (7/30/2021) Dr. Jin will try to develop a list of recent UMES engineering alumni and work place contact information if known. Dr. Jin and Dr. Stanfield will attempt to fill in gaps in contact information through social media outlets and mutual acquaintance.
 - Dr. Matin and Dr. Zhang also have tracking information on graduated students and contact information.
- Dr. Stanfield will research contact information for these alumni points of contact
- Dr. Stanfield will research contact information for prior EAC membership

New Actions

- Complete the recent engineering alumni contact list (Dr. Jin, Zhang, Matin, Stanfield)
- Faculty to provide list of a few topics/questions that they would like to see asked of local industry
- Dr. Mei to provide additional ABET planning documents and plans for EAC reference

Completed Actions

- (7/30/2021) Dr. Jin will look into document archive and access options on the UMES E&AS website or other repositories
- (7/30/2021) Dr. Stanfield to form an top level assessment of Engineering Graduate Program Interest in the regional industry base

The point of contact for this summary is the undersigned.

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