# Background

I recently outlined our general approach to meeting the financial challenges imposed on The University of Akron by the COVID-19 pandemic. In bringing intellectually related disciplines together into fewer colleges, we seek curricular and course delivery efficiencies as well as reduced cost of administrative services. Thus, a redesign of the academic structure of The University of Akron commenced on April 21 with the goal of building a new structure to deliver our mission with the $260 million general fund budget that we estimate remains going forward.

The redesigned college administrative structure will be supported by a new budget for the new colleges. The process of setting those new budgets was described in the video on the OAA website and is informed by benchmark data. The University Council Budget and Finance Committee has been benchmarking our expenditures across functional activities such as instruction, academic support, student support, institutional support, public service, and auxiliaries to name a few. Their recommendations will be shared soon.

We have engaged in a feedback process over the past ten days. This report outlines the substantive trends and themes that emerged from the feedback process, shares the steps that were taken to bring consensus by those involved in each college and specifies the areas for Faculty Senate advice and input.

# Alternatives and Concerns

Feedback was solicited via a discussion board in Brightspace as well as a confidential submission form. There were more than 280 confidential feedback submissions. The Brightspace generated 22 distinct threads with more than 100 replies and comments. In addition, some faculty and departments offered short letters or position papers directly to various leaders, many of which are attached as appendices here. The feedback addressed directly in this report is summative and includes the major themes and concerns discussed. For reference, the draft structure developed by the deans and Interim Provost Urgo is attached (Appendix 1).

There were eleven major areas where significant discussion and feedback ensued. Most of the discussions were focused on alternative actions or structures that faculty or students would prefer to be enacted, along with rationale supporting the position. The following are brief summaries of each of these areas of discussion based on my interpretation of comments and exchanges.

**Uncertainty and Implications**. Many faculty are concerned with the impact that the mergers will have on their daily work and interactions as well as fundamental fit of the disciplines to be merged. For example, Philosophy faculty expressed concern with this approach (Appendix 2). It has been clarified that RTP standards for faculty will remain the same as established when the faculty is hired. Likewise, degree program autonomy would remain and be led by a program director. But more work is needed to clarify roles and responsibilities within a new structure

once we have taken these initial bold strokes to redesign the academic structure. OAA will assist the new colleges in clarifying process on important operational matters such as class scheduling, program names, and ongoing administrative support within the larger, combined departments. The faculty and the deans of the newly established colleges will be encouraged to work these matters out in more detail as we move forward and to be accommodating to disciplinary requirements within the financial constraints that face us.

**Graduate Student Feedback.** The graduate students of the Integrated Biology (IB) program and the College of Polymer Science and Polymer Engineering (CPSPE) both expressed concern and disagreement with either directly proposed (CPSPE) restructuring or potential for restructuring (IB) going forward. In addition, there was a general concern about the future of funding allocated to each of these programs given the perceived impacts on the student experience. Both groups urged not disrupting the current structures and continued support at current levels for graduate students and these programs. The letters are attached in Appendix 3.

**STEM College**. Many subsequent discussions in the PSPE, Math and Statistics areas were quite supportive of forming a STEM college and moving into such a unit. What exactly would be included in such a STEM college is open to some interpretation. There are counter arguments about the underlying philosophy of the fundamental sciences versus the applied sciences/engineering. This divide has been very evident to me as well through the years. I requested that a poll be conducted to assay the opinions of the impacted faculty in BCAS (Appendix 4). The poll gives clear evidence that the physical science faculty are not supportive, yet the overall votes are split, slightly favoring a STEM college formation. We are currently conducting the same poll among the faculty in other colleges including CAST, CPSPE and Engineering. The deans considered this option in assembling the first draft plan and concluded that a STEM college is not wise. There have been mixed results at other institutions in forming STEM colleges. Minnesota has long had such a model but others, like Clemson, have tried this model but reverted to a structure that places the pure sciences in alignment with general education and the liberal arts. We are not recommending moving this plan forward at this time but are open to this option if endorsed by the Faculty Senate.

**Mathematics and Statistics**. There has been vigorous and professional debate about the appropriate placement of these programs. A letter from the Statistics faculty (Appendix 5) as well as a discussion board from the Math faculty have fleshed out the key issues. Statistics acknowledges and prefers that the Math and Statistics faculty share a single chair as a single department. Both the Mathematics and Statistics faculty prefer to join a STEM college, yet that is not a viable option currently. Statistics is willing to merge within CBA but Mathematics is not interested in moving to CBA. The move to Engineering is not a simple decision either and the faculty are split on this matter. Philosophically, Engineering and Applied Sciences are large consumers of the Math/Stats course offerings. Having those units under the same umbrella would assist in assuring course and learning objectives in Math/Stats would be well-aligned to the professional practice degrees and, hopefully, lead to a more responsive feedback loop to improve student success. In addition, the more applied mathematics and statistics research opportunities with Engineering and Applied Sciences may be enhanced under a single college

administrative structure. The opposing view would point to the differences in long-standing culture and history. These units provide a significant service to the rest of the University and the necessity to support other college's curriculum is the norm in BCAS. In addition, BCAS is a more neutral launching point for research collaborations across campus beyond Engineering/Applied Sciences such as Education or Business. We seek Faculty Senate's guidance and advice in this matter.

**Wayne College**. The draft structure resulted in some confusion on the future of Wayne College. The University of Akron will continue to have a vibrant regional campus at Wayne in Orrville and we will continue to coordinate the activities of all of the regional campuses through one office reporting to the provost. Also, we are looking for the faculty located at the Wayne campus to continue the work that they started in 2018 to align with their respective home departments on campus (Appendix 6). Based on comments found on the Brightspace discussion board, it seems that the Wayne faculty are agreeable to this path.

**Bachelor of Organizational Supervision (BOS).** The draft structure from the deans left this program's home college open for discussion. There was interest in merging CAST with Wayne College and including BOS, but this would result in a sixth college with significant geographical spread and unclear curricular synergies. Given this reality, BOS was considered for inclusion in the College of Business Administration or within BCAS. Several faculty of the School of Communication expressed significant interest in the BOS and they are instrumental in delivering several courses in this curriculum. The CBA considered BOS as well, especially considering their interest in developing a degree completion option within CBA. Given the nature of curriculum and the accreditation issues, CBA agrees that the more natural home for BOS is in the School of Communication in BCAS.

**CAST Mergers.** Although there were vocal opponents to the merging of many CAST programs with the engineering disciplines into a new college, there is also significant support that justifies moving forward in this fashion. The new college structure will need to work with the CAST programs to decide whether to combine technology / applied science programs with the appropriate engineering discipline (e.g. Mechanical Engineering Technology with Mechanical Engineering) or to group sets of technology / applied science programs together as a cluster (e.g. CIS and Electronic Eng. Technology). These decisions will occur within this new college based on the dean leading a discussion of the faculty. Other issues will arise as well such as the college name and administrative support.

**Disaster Science and Emergency Services.** The deans recommended to move Disaster Science and Emergency Services from CAST to the College of Health & Human Services (CHHS) given the clear linkage between emergency response and the health professions. Another potential merger could have been with criminal justice in BCAS but the DSES faculty and the deans all agreed that CHHS was the best home. As with other matters above, we remain committed to faculty preference when viable. ThusDSES seems to be well-placed in the earlier draft structure.

**Cybersecurity and Digital Forensics Programs.** One matter that emerged during the feedback period will benefit from the advice and recommendation of the Faculty Senate. Subsequent discussion brought up additional ideas for placement of related programs affiliated with DSES (Appendix 7). Two options in the CIS program, the Cybersecurity degree and the Digital Forensics degree, both have a history and linkage to the DSES department that might justify their placement in CHHS. There are strong opinions on both sides of this issue. I suggest a careful reading of the materials in the Appendix. In moving to DSES, it is my understanding that the cybersecurity and digital forensics degrees would be disentangled from the CIS networking and programming degrees and move forward with a modified curriculum emphasizing threat management more holistically rather than detailed computational or programming methodologies to mitigate cyber threats. The CIS faculty envision a computationally focused degree offering and hope to secure ABET accreditation going forward. My assessment is that the faculty have two differing visions for cybersecurity and are focused on differing aspects of the field.

In this matter, there seem to be some options. First, all four options can stay in CIS and stay in Engineering. Second, the CIS cybersecurity and digital forensics options can move to DSES along with the appropriate faculty, with CIS keeping the networking and programming options, and DSES will adjust the cybersecurity and digital forensics curriculum to form a distinct set of DSES degrees in these areas(subject to normal rules and policies). Third, the faculty can split, and each program be allowed to develop of its own accord but being properly named and described so that students understand the differences in curriculum and career opportunities. I ask that Faculty Senate provide some advice and feedback in this matter as well.

**LeBron James Family Foundation College of Education.** There was no disagreement about moving the Education degree programs into a school structure going forward, but there were some that advocated moving the LeBron James Family Foundation School of Education (LJFFSoE) to CHHS instead of BCAS. The faculty engaged very productively in the discussion boards and ultimately met as a group to discuss the two options. They were willing to embrace either option but there was preference (Appendix 8) to move the LJFFSoE to BCAS.

**College of Polymer Science and Polymer Engineering.** The draft proposal from the deans recommended keeping the PSPE faculty together but to have them form a research institute, given the nature and mix of work that they have historically pursued. The Faculty Senate Executive Committee proposed an additional measure to assign the faculty to relevant home academic departments in chemistry, biology, geoscience, or various engineering disciplines. Both Biology and Chemistry faculty (Appendix 9) recommend that CPSPE maintain its college status given its brand presence, while offering up that joint appointments would make sense and would be welcomed.

CPSPE leadership has indicated they are eager to continue to grow their contribution to the instructional mission in the classroom, especially in undergraduate coursework. Given the current nature of managing resources and faculty time, it has been difficult for the PSPE faculty to find teaching opportunities in the relevant core disciplines on a consistent basis. Those core

disciplines, in turn, need to have certainty on teaching capacity within the department. As a result, it currently is difficult for those departments to accommodate PSPE faculty teaching requests in our existing structure. There is consensus to move to split or joint appointments for all PSPE faculty going forward. The details of voting rights, course load, etc. will need to be worked on in the coming year but the fundamental idea has broad support.

During the feedback process, the alumni and external stakeholders were vocal about keeping PS and PE faculty together, but often recommended making it a department or a school. The brand presence of the title of "College" is significant but the title of "School" seems to be equivalent in most stakeholder's perception. The key outcome desired by the stakeholders is to continue to have a combined polymer science and polymer engineering administrative unit.

Given the importance of PSPE to our national reputation and our longstanding history in this area, we will move to merge PSPE as the School of Polymer Science and Polymer Engineering into another related college. For now, the new Engineering/Technology/Applied Science college makes the most sense, but a STEM college could be an even better solution. We expect that the Polymer brand will be encompassed in the new College name.

## Next Steps

The bylaws of The University of Akron Faculty Senate speak to the duties delegated to this body by the Board of Trustees. The duties include, "Review and offer recommendations concerning proposals for the creation, abolition, or rearrangement of colleges, departments, schools, or divisions of instruction, proposals from university-wide committees, and such other matters as may be referred to the senate by the president of the university. Such proposals shall be forwarded to the executive committee for inclusion on the agenda of senate meetings." In turn, the administration and the Board of Trustees will consider Faculty Senate recommendations and advice in making a final decision. The intent is to bring a new academic administrative structure to the Board of Trustees for their approval at the special May 29 Board of Trustees meeting.

This report constitutes the opportunity for Faculty Senate to fulfill this duty. The University of Akron must move forward through this current challenge and we need to do so together. The Faculty Senate is asked to guide us forward, going left or going right based on its wisdom. We do not have the option to stand still without causing permanent damage to the institution. We may not get every decision perfectly correct but, once past this challenge, we can retrace our steps in some areas as needed. Nonetheless, we need to put our best foot forward now.

In sum, the administration and the Board of Trustees seek Faculty Senate's advice and input on the following matters:

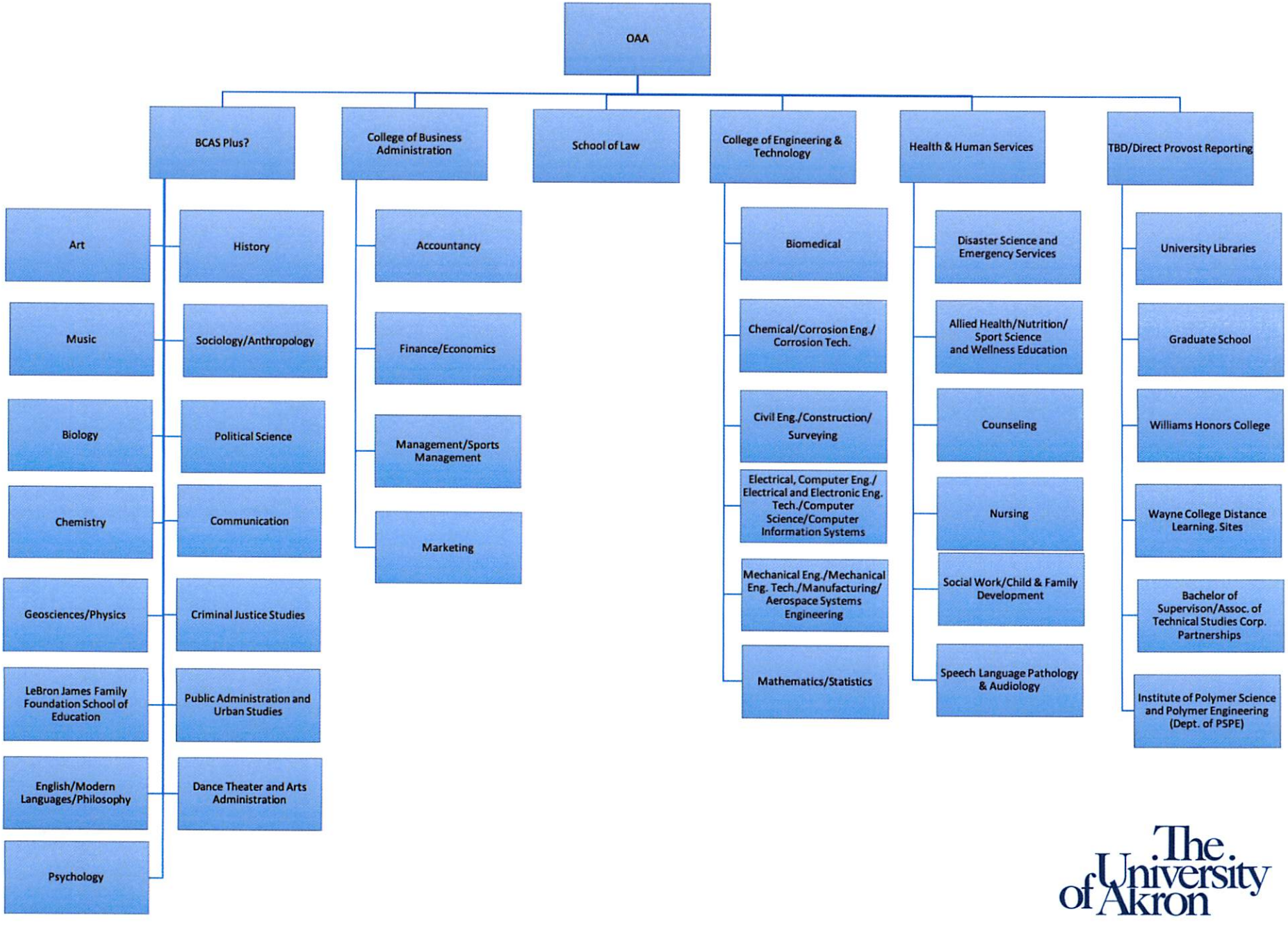
1. Mathematics and Statistics. Four options have emerged:
    a. Mathematics and Statistics stay in BCAS as a single department
    b. Mathematics and Statistics move to Engineering/Applied Sciences as a single department
    c. Mathematics stays in BCAS, Statistics moves to CBA (merging with Economics)
    d. Mathematics moves to Engineering/Applied Sciences, Statistics moves to CBA (merging with Economics)
2. Cybersecurity and Digital Forensics degrees. Three options have emerged:
    a. Both degrees stay under the current CIS structure and join Engineering/Applied Sciences
    b. Both degrees move to DSES in CHHS as the faculty of the program request
    c. The faculty split and each program develops separate degree offerings focusing on different aspects of Cybersecurity and Digital Forensics

This report has been presented to Faculty Senate Executive Committee on May 19, 2020, with the intent of presenting to a special meeting of the Faculty Senate on May 22, 2020.

The Faculty Senate feedback will be included in the plan that President Miller and I will present to the Board of Trustees at the special meeting on May 29, 2020. In parallel, the new budget levels will be set within the new colleges for the Board's information and feedback. The new base budgets and needed adjustments will be completed before the end of June.

**Appendix 1**

# College Flowchart Draft Proposal for Discussion




The University of Akron

**Appendix 2**

Dear President Miller and Provost Wiencek,

We write to you because of our concern for the financial health of the University, especially in connection to the Department of Philosophy. We respectfully urge you to table any proposal to associate the department administratively with other departments. In particular, we want to note that our productivity far outstrips the norm, and ask that in your wisdom, you safeguard the structures underlying our fiscal and pedagogical success.

Primary among the structures requiring your protection is the link between our chair and faculty. Our high profit margin and pedagogical excellence flourish because of our chair's insight into the unique philosophical talents of our faculty. In the past, under the guidance of successive visionary chairs, our small but talented faculty, with a relatively modest budget, has been able to unleash creativity in ways that are unprecedented among the university's departments and schools.

In brief, we believe that undermining this link – a proven formula for success - with a well-intentioned administrative reorganization aimed at what would amount to only a minimal cost savings, would prompt a significant revenue hit to the university.

Four aspects of our department's success are vulnerable to administrative reorganization.

**1) Economic Profit brought by the Department to the University:**
The Philosophy Department has perhaps the best profit to cost ratio of any UA department. Annually our budget averages $1 million and our revenues average $4 million. Our department's cost is only 25% of our budget. This is, in part, due to the heavy teaching by FT faculty. The annual unit aggregate load for 2018-19 was 88%. Average PT summer salary is approximately $4,400/class, and our 8 sections yield about $240,000 in revenue. Because of the constant vigilance of our chair, and her insight into the philosophical strengths of our faculty, our department has remained well run, revenue generating, and entrepreneurial. To tamper with this recipe would be to undermine our fiscal results.

**2) University Dependence on Programs and Service courses provided by the Department:**
We are a department with approximately 50 majors, including PPE and PSP, and 50 minors. For the greater university, however, we are primarily a service department serving students across disciplines. This AY our department offered over 9684 SCH – a 7% increase from last year. Many of our courses – notably our ethics, logic, bioethics, and philosophy of feminism and language – are options in the GenEd curriculum and/or required by many disciplines, including Engineering, Health Professions, English, and Biology.

This spring we received approval for four innovative degrees:

- 3+3 Philosophy BA & Law JD
- Police Ethics Certificate – which aims to recruit police officers and others in law enforcement
- Artificial Intelligence Certificate – which aims to recruit students and industry professional
- Environmental Ethics Certificate – which aims to recruit students, industry professional, and state employees

These degrees exemplify our chair's insight into the nature of our discipline and the specialized knowledge of our faculty. Such insight is necessary to finding innovative and creative ways to improve

the quality and number of university offerings. Such service to the university does not spontaneously generate. Administrative reorganization and faculty reduction would certainly mean not being able to continue to provide excellent service to the university.

**3) Interdisciplinarity:**

Philosophy is the model of interdisciplinarity. Our PPE (Philosophy, Politics and Economics) program was the university's first interdisciplinary major (created in 1999). On the basis its success, we created the Social Science PSP (Philosophy, Sociology, Psychology) major in 2010. The 3+3 Philosophy BA & Law JD is the most recently approved addition to our interdisciplinary majors. Another outstanding and unique feature of our department's interdisciplinarity is the popular set of diverse minors including, Bioethics, Science and Religion, Philosophy of Law, and courses including, environmental and police ethics, philosophy of science and religion, neuroethics, philosophy of race, philosophy of feminism and language, and social and political philosophy. These initiatives position graduates for success in careers in law, government, business, politics, medicine, international relations, in addition to philosophy as indicated by the success of our alumni. Interdisciplinary programs such as these can flourish only under the guidance of a chair with deep and direct knowledge of our field, and of the strengths and talents of our faculty.

**4) Academic and Scholarly Excellence**

In connection with our elite interdisciplinary offerings, the philosophy department enjoys a special relationship with Oxford University, offering our students an opportunity to pursue summer study.[1] The list of US schools with such a program is very short, including:

Duke University (administered jointly with UNC)
The University of Akron
University of Michigan
University of Pennsylvania
Yale University (Ethics, Politics and Economics).

Without the special tutelage of our chair this program would not been created. Under our current chair, our department excels academically, even though we serve vast numbers of students across the university. We are in the top quartile for research productivity among philosophy departments. Our chair's recent publication with Oxford University Press, further illustrates the best of our productivity, and inspires our faculty to strive for scholarly excellence. Her insight into our broad range of diverse interests enables us to coordinate our teaching and research activities. This has enabled us to achieve a status beyond the norm.

Given the above indices, we urge you, President Miller and Provost Wiencek, for the sake of the university, to safeguard the structures underlying the success of the Philosophy Department. We request that you preserve our chair and faculty so that we may continue to contribute significantly to UA's financial health, and to foster academic excellence.

Respectfully submitted,

The faculty of the Department of Philosophy

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[1] Source: https://ppe.nd.edu/links-to-other-ppe-programs/

Appendix 3

**Integrated Bioscience Ph.D. Program**
Buchtel College of Arts and Sciences

Dear President Miller, Provost Wiencek, and Dean Subich,

We are a group of Ph.D. students and candidates of the Integrated Bioscience (IB) Ph.D. Program and we are writing this letter in response to the reorganization of the University of Akron (UA) being undertaken as a result of the SARS-CoV-2/COVID-19 pandemic. This announcement has resulted in significant concern amongst graduate students regarding the access to the necessary resources to continue our research and our ability to foster a successful learning and research environment for UA undergraduate students. In this letter, we highlight the integral role of graduate students in UA's research program and undergraduate education and the importance of the IB Ph.D. Program in the wide-spread success and prestige of the University of Akron.

**The Integral Role of Graduate Students in the University of Akron's Research Program**

Graduate students are the heartbeat of successful research and innovation at UA. Graduate students in the sciences devote inordinate hours alongside faculty advisors to generate creative projects, obtain external grants, collect and analyze data, and ensure project goals are met and findings are brought to publication. Striving to become the researchers of tomorrow, graduate students consistently make important contributions to our respective fields. These contributions directly increase the success and prestige of UA by increasing public awareness of the important research being undertaken at UA. Increases in the prestige and success of UA are sure to correlate with increases in undergraduate student enrollment. UA graduate programs, like IB, foster a culture of ingenuity, fortitude, and collaboration that draws the best minds from around the globe. As such, graduate students directly contribute to the bright diversity present on UA's campus, a notion that is integral to the effective function of the University, its research programs, and reputation.

**The Integral Role of Graduate Students in the University of Akron's Undergraduate Education**

Graduate students actively work to help undergraduates build fruitful futures through mentorships in both the classroom and the laboratory. Many UA graduate students are supported by teaching assistantships (TAs). In the Department of Biology (the home of IB), TAs are the face of undergraduate education and often bridge the gap between students and faculty. TAs are generally viewed as more approachable by students and can help them remedy problems in the classroom. Additionally, TAs dedicate many hours promoting healthy learning environments and instructing students through office hours and individual appointments.

Many graduate students in the Department of Biology also mentor undergraduate students who desire to be involved in research. Additionally, undergraduate students required to complete an Honors thesis frequently seek out graduate student mentors, often whom they first meet as a TA in their courses as well. Through these opportunities, undergraduate students learn vital

skills that will set them apart from their peers and prepare them for success in future academic or industry roles. These mentor relationships enhance both the graduate and undergraduate students' experiences at UA and make it a desirable institution for budding scientists.

**The Importance of the Integrated Bioscience Ph.D. Program to the Success and Prestige of the University of Akron**

An increase in collaboration across diverse disciplines has been highlighted as one of the justifications and benefits of the reorganization of UA. Cross and transdisciplinary research is commonplace in the IB Ph.D. Program and is one of its core tenets. As IB Ph.D. students, we are required to include at least one faculty member from outside of our home department on our dissertation committees and at least one chapter of our dissertations must have an integrated component. As such, Integrated Bioscience serves as an example of the unique outcomes, productivity, and prestige that originates from interdisciplinary research.

There are currently 52 Ph.D. students in the IB Ph.D. Program, and we are spread across departments (and colleges) including Art, Biology, Computer Science, Geosciences, and Polymer Science. The academic backgrounds of IB Ph.D. students are even more diverse including backgrounds in biology (with wide representation among the subdisciplines), chemistry, physics, forensic anthropology, business, materials science, engineering, architecture, and computer science. Furthermore, the IB Ph.D. Program has attracted the attention of students from around the globe including Ireland, Iran, Portugal, Belgium, Germany, France, Taiwan, and Ethiopia. Additionally, many IB Ph.D. students are fellows or researchers involved in the Biomimicry Research and Innovation Center, one of the few centers of its kind and the first to offer Ph.D. training in the popular fields of biomimetics and biomimicry. The extensive diversity of our Ph.D. students in both cultural and academic contexts is an asset to the effective functioning and reputation of UA.

Integrated Bioscience Ph.D. students regularly engage in undergraduate education in both the classroom and the research laboratory. At least 30 enrolled IB Ph.D. students have served as teaching assistants in the 2019-2020 academic year, assisting in the instruction of a total of 15 different courses and 111 sections. IB Ph.D. students are actively involved in the mentoring of undergraduate students in both collaborative and independent research projects. As of November 2019, there were over 80 undergraduate students working on research projects in the Department of Biology. The Department of Biology also operates the Tiered Mentoring Program, in which undergraduate students are paired with an IB Ph.D. student to work on laboratory research projects. The undergraduate students later develop independence in the program and work to mentor incoming Tiered Mentoring students. Since its reboot in 2018, the Department of Biology has matched 59 undergraduate students with IB Ph.D. student mentors.

IB Ph.D. students also drive and assist in positive engagement between UA and the public, efforts that are critical in securing external funding and engaging with and encouraging prospective students. For example, many IB Ph.D. students give brief talks and demonstrations about their research and/or their faculty mentor's research for prospective and current students. IB Ph.D. students also volunteer to give department tours for undergraduate student visit days. Another example includes outreach programs at the University of Akron Field Station (UAFS)

which benefit from the participation and assistance of IB Ph.D. students. The field trip and in-classroom outreach programs from UAFS have resulted in the direct interaction with over 7,500 K-12 students since October 2015. Such critical engagement could not have been undertaken without the hard work and dedication of the UAFS Manager, Dr. Lara Roketenetz (a graduate of the IB Ph.D. Program). The UAFS outreach programs generate funding and community support through the UAFS Friends Group, as well as function as broader impact activities for several National Science Foundation grants.

The Integrated Bioscience Ph.D. Program and its Ph.D. students are vital assets to UA through positive impacts on the education and enrollment of undergraduate students, generation of vital research, and engagement with the broader public. Such impacts are critical to the success and prestige of this urban research university.

**The Future of Graduate Students and the Integrated Bioscience Ph.D. Program**

We hope that this letter serves as a reminder that graduate students are invaluable to the effective operation of the University of Akron. Graduate teaching assistants are an important asset to UA and offer unique opportunities to engage with and encourage our current and future students in the classroom. We hope that you agree that it should remain that way. Research and corresponding Ph.D. programs, particularly those in STEM, are critical in classifying UA as an urban research university. The current freeze on University spending, especially for funds that have already been approved, is beginning to result in significant delays for a number of our students. Thus, we hope you will consider lifting this freeze once plans become finalized and clearer. Finally, although the Integrated Bioscience Ph.D. Program is incredibly diverse, biology is the thread that ties the program together. Therefore, we believe that the director of the program should remain in the Department of Biology and administration of the program should be overseen by the college the Department of Biology is ultimately placed into.

We urge you to keep the contents of this letter in mind during the reorganization process to minimize any negative impacts on graduate students and the Integrated Bioscience Ph.D. Program, core pieces of the success and prestige of the University of Akron's research program and undergraduate education. We thank you for all that you are doing for the University of Akron and the community during these troubling times. We are certain that we can rise together and overcome these obstacles presented by the SARS-CoV-2/COVID-19 pandemic.

With best regards,

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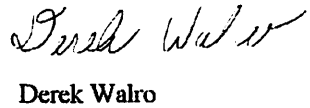
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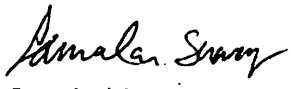
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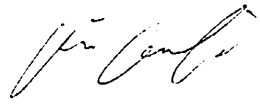
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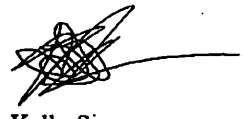
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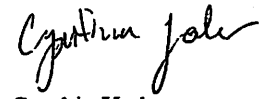
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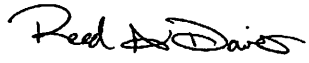
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To Whom It May Concern:

My name is Derek Schwarz and I am the current Graduate Student Government (GSG) Senator for the College of Polymer Science and Polymer Engineering (CPSPE). On May 7th, 2020, Provost Wiencek posted a video on the University of Akron's YouTube channel, in which he proposed new budget and academic structures, in response to the 65 million reduction in general funds[1]. One such proposal was to restructure the CPSPE, eliminating the college and reallocating its staff and students to other existing colleges[1]. Early this morning, May 8th, 2020, I held a town hall open to all current CPSPE students to hear their concerns and questions about the suggested move, with the goal of accurately and concisely conveying them to Provost Wiencek, and others in charge of making such a proposal. On conferring with my constituents, we have several questions and comments we would like to share.

The first regards the proposal to dissolve the CPSPE and reorganizing the faculty under different academic roofs, with this effort resulting in a reduction of administrative overhead. The college was founded in 1988 and since its inception, has been recognized as the world's best in polymer chemistry and polymer engineering research (I have included a brief article below about the CPSPE's history below). This lauded legacy has been created by CPSPE faculty and students, as they continue to be on the cutting edge of research. This esteem has allowed the University to leverage its strength to lead to the creation of industrial connection with surrounding companies, large and small alike, as demonstrated with the work done in the National Polymer Innovation Center. These symbiotic connections have led many of the College's graduates to work for premier plastics companies, expanding Akron's reputation as a premier research institution. The next generation of graduate students from around the world were inspired to study at Akron, because of the CPSPE's uniqueness and specialization.

The second involves the comments surrounding the College's role within the University. In 2018, there were cuts to degree programs in order to reduce costs. These programs were cited as those "that duplicate heavily invested programs at other institutions"[2]. The idea behind these cuts was that Akron could refocus funds from programs that surrounding universities were the regional authority in to "key areas of strength"[2]. The first strength highlighted on that list was polymers. While these findings were made under a previous administration, the board who voted on these cuts is the same, sans perhaps Mr. Michael J. Dowling, Mr. Thomas F. Needles and Ms. Cindy Crotty, meaning that the current Board of Trustees, in part, support the claim that polymers are a key area of this institution.

With Akron's premier status as a polymer powerhouse by researchers around the globe, Fortune 500 companies, and partially acknowledged by the trustees, we are puzzled by the proposed dissolution, as it goes in the exact reversal from comments calling for its investments and import to the University. It may be that the University's position has suddenly flip-flopped, as evident in the message written by the OAA that, "They (CPSPE) receive a great deal of resources from the University but have limited engagement in undergraduate education"[1]. Firstly, my constituents are concerned that the current administration has not provided evidence to support the claim that CPSPE is allocated a "great deal of resources" as well as amount saved through proposed cuts. Such transparency would be appreciated as it would allow those affected by these changes to rationalize further decision the University will make. Additionally, we believe the second part of the comment concerning undergraduate education to be inaccurate. The College has a multitude of interactions with undergraduate students. Undergraduates participate in research opportunities under the guidance and

mentorship of CPSPE graduate students and faculty, the faculty within the college have built a robust Research Experience for Undergraduates (REU's) attracting student from across the United States, hosts yearly lecture series featuring premier guest speakers that re open to the campus and community premier guest speakers for the University at large, etc. CPSPE has proposed further investment in undergraduate education by expanding the current polymer minor into full undergraduate degrees. I would be happy to discuss other opportunities for growth that have been brought to me by graduate students if approached. What I know for certain is that the graduate students of CPSPE and graduate students overall provide an incredible amount of value to the University and is something that should not be overlooked.

The final comment we have is to address those who would see the CPSPE redistributed around other colleges will not take anything away from the quality of Akron's higher education. The same professors will still be present, completing the same research as it would have, with the University still reaping the same rewards and acclimation as it did once before. This is not the case. CPSPE strongly contributes to the high regard of the University of Akron due to the CPSPE faculty and their cutting-edge research addressing current and relevant problems. Akron is highly regard not because it has one professor, but the group of incredible faculty that are ushering the field forward. In short, the strength of the CPSPE is much more than the sum of its parts, with dismemberment of its body leading to an impotence of Akron's strength. With the CPSPE gone, so will the reputation that the University of Akron is a leader in polymer research will be damaged and potentially sacrificed. International and domestic students, who, as stated above, were enthralled to come to Akron for its uniqueness, will go to other institutions which are as a whole better than the capabilities Akron possesses. To paraphrase m colleagues, "If I wanted a chemical engineering or chemistry degree, there are other schools better suited for that, that paid more, and were much closer to home. I came to Akron because of the CPSPE's dedication to polymers". If the proposal, as proposed, is adopted, so too will the prestige that Akron has drawn from the world. The legacy the CPSPE has built over the 30+ years of existence will be tarnished overnight.

I write to you all today as Senator for my college, but as a digression from my democratically appointed position, I want to speak to you as a young adult who for the past 18 years has made NEO home. I remember vividly Dr. Dhinojwala coming to my high school when I was 14 for a science symposium and showing me the research that goes on at the CPSPE. Over the last decade, I have worked meticulously in setting myself up to be a part of a research institution such as Akron's CPSPE. The CPSPE cherishes and recognizes the incredible standing and responsibility it has publicly and privately within Northeast Ohio, the polymer community and those who benefit from what we discover. I urge those reading, both newly appointed and longtime members, to ask themselves what makes Akron great and unique. If my college is not worth preserving in its current form, then those around the world will know that the foremost polymer authority is no longer a moniker appropriate for its description.

I have included the following URL which corresponds to an online petition, signed by concerned citizens, particularly graduate students of the College:

http://chng.it/W8fkLst289

Thank you for your time and God Bless.

Derek Schwarz
Graduate Student Government
College of Polymer Science and Polymer Engineering
Email: dbs41@zips.uakron.edu

Sources Cited for Information

1: https://www.uakron.edu/oaa/initiatives/redesigning-ua/index

2: http://share.uakron.edu/mailAll/Digest/archive/154243

Article Regarding the History of the CPSPE

https://uakron.edu/im/news/the-college-of-polymer-science-and-polymer-engineering-a-brief-131-year-history-by-frank-n-kelley/

**Appendix 4**

## Wiencek,John M.

**From:** Fridline,Mark M
**Sent:** Wednesday, May 13, 2020 2:00 PM
**To:** Wiencek,John M.; Saliga,Linda Marie
**Subject:** STEM College Survey Results
**Attachments:** STEM College Survey Comments.xlsx

Provost Wiencek and Dr. Saliga,
Here are the results of the STEM College survey. There were 48 faculty responses, of which 26 (54.17%) were in favor of a STEM College concept, and 22 were against (45.83%). If interested, the following is a breakout of the responses by department:

| | Yes | | No | | |
|---|---|---|---|---|---|
| Department | Count | Row % | Count | Row % | Total |
| Biology | 0 | 0% | 8 | 100% | 8 |
| Chemistry | 0 | 0% | 7 | 100% | 7 |
| Computer Science | 1 | 100% | 0 | 0% | 1 |
| Geosciences | 1 | 33% | 2 | 67% | 3 |
| Mathematics | 16 | 100% | 0 | 0% | 16 |
| None given | 3 | 60% | 2 | 40% | 5 |
| Physics | 0 | 0% | 1 | 100% | 1 |
| Statistics | 5 | 71% | 2 | 29% | 7 |
| Grand Total | 26 | 54% | 22 | 46% | 48 |

Also, I have enclosed all the survey comments. I hope the survey data and summary is helpful in the reorganization plans...

Mark

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**From:** Wiencek,John M. <johnw@uakron.edu>
**Sent:** Wednesday, May 13, 2020 11:31 AM
**To:** Saliga,Linda Marie <saliga@uakron.edu>; Fridline,Mark M <mmf@uakron.edu>
**Subject:** Re: Possible STEM College Survey

I really appreciate it 😊

John Wiencek from Cell Phone

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**From:** Fridline,Mark M <mmf@uakron.edu>
**Sent:** Wednesday, May 13, 2020 8:13:20 AM
**To:** Wiencek,John M. <johnw@uakron.edu>; Saliga,Linda Marie <saliga@uakron.edu>
**Subject:** Re: Possible STEM College Survey

Provost Wiencek,
I did include an opportunity to provide comments. I will provide you with all these comments and what percentage of faculty support a STEM College concept today.

Appendix 5

**Response of the Department of Statistics regarding the proposed reorganization**

The Department of Statistics have had many lively discussions, but with the following assumptions in place (in order of importance): (1) All suggestions must have the University of Akron's best interests in mind, (2) Keep all suggestions in line with what could best grow undergrad, graduate, and possible certificate enrollments, (3) What college would benefit the most by having the Department of Statistics, and (4) What would be the best fit for the Department of Statistics. We assumed shared services (i.e. chair, admin assistant) with another department. All suggestions would not require any additional resources.

After carefully discussing all possible administrative locations for the Department of Statistics here at the University of Akron, the following is our recommendation:

STEM College – If this materializes, it would be a logical location for our department. We have an emphasis in applied statistics and our faculty work on projects in a wide variety of areas, not just one area, such as engineering or business.

College of Engineering – Some of our faculty have areas of statistical expertise related to aspects of engineering research, so there could be some synergism there. Also, there is potential for our unit to grow by offering graduate level certificate programs that would be beneficial to both engineering graduate students as well as engineers employed by local industries. However, since most of the credit hours we produce would be from students outside the College of Engineering, our unit would be an unusual entity. Also, if Math does not locate within this College of Engineering, our position there would be even more unusual as we wouldn't have a natural department to share a chair with.

College of Business Administration – Some of our faculty are intrigued with the concept of being administratively located in the CBA. Logically, it makes most sense to be located within the Business Management group. We could help strengthen the quantitative aspects of programming within the CBA, with potential for growth, particularly with a new Applied Stats Minor that is being developed, as well as with graduate certificate programs in Data Science. Most of the graduates of our BS and MS programs choose careers in the business world. Also, the field of Statistics ranks very high as a top job in business with incredible job opportunities for our graduates. However, there is great concern that the Department of Statistics would not remain intact and be spread amongst a few departments – of which no one is in favor.

College of Arts and Sciences – This is our unit's least favorite choice. If we were to remain in this college and Math leaves, it is not clear as to which unit we would share a chair with. Note that we do not consider our discipline to be in any way an arm of Math, and strongly believe we need to remain an independent entity, though we would be fine with sharing a chair with Math.

The department faculty strongly favored being part of a STEM College. When ranking all four possibilities, CoE was ranked second on our list. However, between the CoE and CBA our faculty were evenly split if only those two were considered.

Considering that our students are in high demand especially since our BS and MS programs are unique to NE Ohio and we also service many other departments with our courses, we respectively ask that administration considers Statistics as one of its strengths within the UA community. For instance, we were discussing internally amongst our NTT's how we could add sections of a revamped Basic Statistics course that would eliminate the need for the students to take remedial math courses. Talks immediately stopped because of the world health crisis, but with your help, we could restart these discussions. Not alone could we attract new students with lower entrance scores (and help them graduate from a great University) , but also help graduate current students that would possibly drop out because of their frustration of taking several semesters of remedial math that doesn't count towards graduation. No matter what is decided by administration, collectively we are concerned about further cuts to our programs and/or faculty. We are teaching full sections and turning away students in some of our courses, as all seats in our lab rooms are filled. We are down from having 12 full-time faculty a few years ago to 8, despite an increase in the number of Statistics majors over this time period. We lost nearly all of our funding for GA's, but have been able to stabilize our MS program by a creative plan in which some of our MS courses have been merged with advanced undergrad courses. In the most recent program review conducted by UA, our BS program ranked second among all programs at the university and our MS program was also very highly rated.

Now and into the future, we would like you to consider Statistics as problem solvers for the University by helping grow enrollment, assisting students to achieve their goals of graduating without sacrificing instruction, and graduating students in a field that are in high demand. Thank you for your careful consideration into this matter.

Respectfully, The Department of Statistics Faculty

**Appendix 6**

**Points of integration between the main campus and the regional campuses.**
UPDATED: 5.14.2018

VISION: *To make Wayne College (and the regional campuses/locations) more of a four-year school and less of a two-year school.*

ACTION: *Wayne College, formerly independently accredited, has moved its accreditation to the University of Akron by a super-majority vote of the faculty, staff, and contract professionals. The Higher Learning Commission has accepted this transition.*

1.) Academic programs – creation and ownership. The main campus academic department has the power and the responsibility to create academic programs, and the content thereof, that will be offered on the main campus and on regional campuses. The main campus department should make sure that there is sufficient opportunity for participation of regional campus faculty in this process. The regional campus dean, in consultation with the main campus department chair or director, has the power to determine the qualification of faculty to teach specific courses within the confines of accreditation as espoused by the Higher Learning Commission and any special, external accrediting body that may apply (e.g., CAEP, AACSB, ABET, ABA, etc.). Once a faculty member at any campus has been approved to teach a particular course, that approval cannot be taken away unless sufficient cause exists (e.g.; not meeting HLC or external accrediting body standards such as a lack of professional development activities). If a course has been approved for online or hybrid delivery, and a faculty member has been approved to teach that course, that faculty member has also been approved to teach that course in an online or hybrid delivery format. The decision as to whether to offer an academic program at the regional campus that is associated with a main campus academic department resides with the main campus academic department and that department's college dean. Academic programs that are offered at the regional campuses and are not associated with a main campus department are determined by the regional campus dean and the regional campus faculty.

2.) Hiring decisions and mechanics. The regional campus dean, working in consultation with the department chair or school director, determines when a need to hire exists. When the provost approves a request to hire, a search committee is crafted to include at least one person from the main campus department. During the search, the on-campus candidates should have some time on the main campus to meet with the main campus department faculty, provide a teaching demonstration and/or presentation of research (the latter if a tenure track hire), and interview with the chair or director. It is the regional campus dean's decision as to whom to hire in consultation with the regional campus faculty and the main campus chair or director.

3.) Attendance at main campus department and college meetings. Regional campus faculty, both tenure-track and non-tenure-track, are expected to attend main campus departmental and college meetings if his or her teaching schedule allows it. The main campus academic departments and the regional campus should work together to make attendance at both meetings as easy as possible.

4.) Voting rights within an academic department. Each main campus academic department should determine the voting rights of its members. However, any regional campus faculty member should have equal voting rights based on tenure and rank.

5.) Tenure and promotion. Tenure and promotion is granted by the regional campus upon recommendation of the regional campus faculty and the regional campus dean. However, the decisions on both tenure and promotion should allow for comment by three parties on the main

campus including the faculty on the main campus department, the department chair or director, and the main campus dean. It should be clear in any tenure and promotion policy that regional campus faculty are expected to teach more and engage in professional development activities such as publication and presentation less frequently in comparison to main campus counterparts (unless a main campus department requires a teaching load similar to that of the regional campus; e.g., CAST).

6.) Programs without a main campus departmental home. For faculty that are a part of an academic program without a main campus counterpart (e.g., Health Care Office Management), all faculty-related matters should be handled at the regional campus.

7.) University-wide search committees. Regional campus faculty are expected to participate in university-wide search committees for executive-level administrative appointments (i.e., chair/director and above). As well, university-wide search committees should make opportunities available for university-wide search committee service.

8.) University committee service. Regional campus faculty are expected to participate in university-wide service. As well, university-wide committees should make opportunities available for university-wide committee service.

9.) Staffing of courses. The responsibility for staffing classes resides with the regional campus dean in consultation with the main campus department chair or director. When the need arises for the hire of a part-time faculty member, the regional campus dean or his or her designee (likely an associate dean, assistant dean, director, and/or program coordinator) should identify the part-time candidate and consult with the chair or director of the main campus department.

10.) Academic schedules. The times, dates, and formats for course delivery resides with the regional campus dean in consultation with the main campus chair or director.

11.) Faculty senate executive committee. The faculty senate executive committee should have a member from the regional campuses.

12.) Mileage. When a regional campus faculty member travels to the main campus for any university business related activity, he or she should be compensated. When a main campus faculty member travels to a regional campus for a university business related activity, he or should be compensated for mileage. These policies should become express so as to entice greater activity by both groups on both sets of campuses.

13.) Meaning of the word, *consultation*. For the purposes of this work, consultation does not between an agreement must be secured between two parties. Instead, consultation means that one party discusses the matter with another party.

14.) Supporting graduate programs on the main campus. The Wayne College regional campus system will continue to support the graduate programs at the main campus by purchasing graduate assistant ("GA") positions when it is economically feasible to do so. These GA's will teach courses within the regional campus system and gain valuable teaching experience while helping the regional campuses fill teaching vacancies that would otherwise be filled with adjunct instructors. The regional campuses will pay portions of, or the entirety of, depending upon the situation, the stipend and tuition for the GA positions.

**Appendix 7**

**College of Applied Science & Technology**
Office of the Dean
Akron, OH 44325-6001
330.972.6735

**To:** Dr. John Wiencek, Executive Vice President & Provost, The University of Akron

**From:** Dr. Michael Johanyak, Acting Dean, College of Applied Science & Technology
Dr. Timothy McCarragher, Acting Dean, College of Health Professions
Professor Sukanya Kemp, Future Acting Dean, College of Applied Science & Technology

**Date:** May 14, 2020

**Subject:** Move of the Cybersecurity and Digital Forensics Degrees to the Department of Disaster Science and Emergency Services (DSES) in the Reorganization Plan

The three of us met with Dr. Craig Menzemer this morning to discuss the proposed move of the Cybersecurity and Digital Forensics degrees to DSES. He agreed that the Networking and Programming degrees are more closely aligned with the College of Engineering, and that the Cybersecurity and Digital Forensics degrees align more closely with Disaster Science. As a result, the four of us have reached a consensus that supports the move.

The three of us also met this afternoon with the CIS faculty, as well as with Dr. Stacy Willett (Acting Chair of DSES) and Professor Stanley Smith (Acting Chair of the Department of Business Information and Technology, and Program Director of the Cybersecurity and Digital Forensics degrees). The CIS faculty, primarily led by Professor Enoch Damson and Dr. John Nicholas, were quite vocal in their angry opposition to the proposed move. The overall focus of their disagreement was that the Cybersecurity degree must have a strong computer-based foundation and thus needs to remain in the domain of computing. They also expressed a concern that we would not accurately convey their arguments to you, so we invited them to submit their own summary of opposition viewpoints to you on or before 4:30 p.m. today. The CIS faculty voted unanimously in opposition to the move.

For the sake of fairness, the DSES faculty, represented by Dr. Willett and Professor Smith, will submit their supporting viewpoints to you regarding the move by 4:30 p.m. today. The overall focus of their argument is that computing is only a small part of cybersecurity, and they remain convinced that students in both degrees would be better served in DSES where they would earn quality degrees that reflect the true nature of cybersecurity and digital forensics within the broader realm of emergency management and homeland security, as well as within the health and human services professions.

The three of us agree with the compelling arguments of the DSES supporting viewpoints and thus strongly recommend that the Cybersecurity and Digital Forensics degrees be moved to DSES in the proposed College of Health and Human Services.

**Academic Reorganization Proposal Feedback from the following Faculty:**

- Professor Enoch Damson, Computer Information Systems, CAST
- Dr. Shirong Du, Computer Information Systems, CAST
- Dr. Zarreen Farooqi, Computer Information Systems, CAST
- Dr. John Nicholas, Computer Information Systems, CAST
- Dr. Scott Randby, Technical Mathematics, CAST

Dear Provost Wiencek,

Following your invitation for ideas, comments and suggestions on the academic reorganization proposal and Faculty Senate's response, the above-named faculty members would like to share some constructive alternatives for your consideration. We represent the Computer Information Systems (CIS) program in CAST's Department of Business and Information Technology (BIT) and the BS CIS – Cybersecurity's cryptology courses from the Technical Math area in CAST's Department of Applied General and Technical Studies (AGTS). To continue BIT department and the CIS program's growth momentum and significant contribution to the UA's enrollment, we should be afforded the right college and environment to continuously grow and strengthen our programs in such a unique way that we are able to make them more competitive and attractive. We are directly offering our alternatives to you because we do not have the utmost confidence in the current leadership of CAST, BIT and AGTS departments to effectively articulate our concerns and suggestions.

BIT department houses two programs: Bachelor of Organizational Supervision (BOS) and Computer Information Systems (CIS). BIT department has the following points of excellence.

- CIS program is the first in Ohio to offer a cybersecurity bachelor's degree and the only one to develop an on-site test bed for students so far.
- CIS program has the highest computing bachelor's enrollment headcount over the last 5 years (504 as of fall 2019)
- BIT department is among the top-2 departments at UA with the highest bachelor's degree enrollment headcounts over the last 5 years (779 headcount as of fall 2019)
- BIT is among the top-4 departments at UA that awarded the most bachelor's degrees over the last 6 years (207 as of 2019)
- BIT among the top-6 departments at UA with the highest undergraduate student credit hour production over the last 6 years (17,195 as of fall 2019)

First of all, we would like to agree with the Faculty Senate Executive Committee (FSEC) that "*...successful reorganization needs careful consideration, discussion, and clear analysis of costs and benefits.*" While we understand the challenges posed by COVID-19, we believe that keeping the core mission, thriving unique programs, and culture in CAST will be crucial in these current times and the near future. We also agree with the FSEC that CAST's unique programs "*have been successful in serving non-traditional students, first generation students, students from under-represented communities, and students who have different academic needs than students in other colleges.*" We, therefore, have some alternatives to the current proposal.

Irrespective of our alternatives, we would like to indicate our desire to move forward on the following plans, which have already been unanimously approved by the Technical Math area faculty of AGTS department and the Computer Information Systems program area faculty of BIT department.

a) Move the following sequence of cryptology courses required by the BS CIS - Cybersecurity and BS CIS - Digital Forensics degree options to the CIS area.
   - 2030:216 Applied Finite Mathematics
   - 2030:361 Applied Cryptography
   - 2030:461 Applied Cryptanalysis
b) Move faculty member Dr. Scott Randby, Associate Professor of Technical Mathematics to the CIS program area. Dr. Randby was the co-developer of the BS CIS - Cybersecurity and BS CIS - Digital Forensics degree options and the sole developer and instructor of the above-mentioned sequence of cryptology courses.

Our alternatives for BIT programs and the AGTS cryptology courses include the following and they are in order of most preferred.

1. **Combine CAST and Wayne College under the same leadership with BIT department's CIS, BOS, and AGTS department's cryptology courses in the same academic unit.**
2. If for some reason, our first pragmatic alternative is not considered, the next alternative should involve **creating a standalone academic unit that includes the CIS program combined with AGTS's cryptology courses, and the BOS degree, within the proposed College of Engineering and Technology.**
3. The least preferred alternative should involve **splitting the current proposed department in the College of Engineering and Technology, consisting of four huge programs (ECE, EET, CS, CIS), into two departments, and moving the BOS degree to Wayne College.** The suggested two new departments will include the following: Department of Electrical and Computer Engineering/Electronic Engineering Technology and Department of Computer Science/Computer Information Systems/Cryptology courses.

Below are the outlined reasons for our alternatives.

**Combine CAST and Wayne College**

We think this is the best alternative to the current reorganization plan and there is precedence in having the same Dean overseeing CAST and Wayne College. Wayne College utilizes a lot of CAST's courses, especially from BIT department's successful Bachelor of Organizational Supervision (BOS) degree. This alternative provides some excellent advantages which include the following.

- It keeps the core mission, thriving unique programs, RTP guidelines, and culture in CAST while leveraging Wayne College's oversight of the regional campuses and distance learning

sites. CAST's unique programs and Wayne College's oversight of the regional campuses are going to be vital in the current economic recession. As the FSEC rightly puts it, "*regional campuses are vital in the current economic situation. Students will absolutely be considering the costs of education as they try to rebuild their economic stability. Some functions of the regional campus need to occur on the campus and be coordinated by the campus, such as the schedule.*"

- It offers a unique branding opportunity for online learning through a combined CAST and Wayne College. The BOS degree, for instance, has been one general education natural science lab course away from being offered 100% online. And BIT department has been the architect of that by successfully managing and reviving the BOS degree.
- It allows the BOS degree to be offered in a degree-granting college, which is important in protecting the program's current accreditation. The BOS program is currently accredited by the Accreditation Council for Business Schools and Programs (ACBSP). This accreditation also covers the BOS courses offered at Wayne College.
- It allows the faculty and staff in a combined CAST and Wayne College to be focused on the partnerships, advising and other resources for retaining students who may require more or different types of support. This alternative also helps to leverage the strengths of two of the most productive departments at The University of Akron, which are CAST's Department of Business and Information Technology and the Department of Engineering Science and Technology.
- It helps to protect the current accreditation of BIT department's BOS degree and two of the four CIS degree options and leverage the strengths of BIT's unique programs.

**Create a Standalone Department for CIS, Cryptology, and BOS in College of Eng & Tech**

The first alternative offers the best opportunities for BIT department's BOS degree and the CIS program area, combined with the sequence of cryptology courses from AGTS's Technical Math area, to thrive. We believe that combining three of UA's four main computing undergraduate programs in a single academic unit, as proposed, comes with several disadvantages. Some of these disadvantages include confusion articulating the program objects of these programs to students and the difficulty in successfully managing these huge programs in a single department. If for some reason, our first pragmatic alternative is not considered and the current plan moves forward, we believe that the CIS program needs to be kept as a standalone academic unit combined with AGTS's cryptology courses, and the BOS degree, within the proposed College of Engineering and Technology. This alternative has the following advantages.

- It provides a good opportunity for BIT and the CIS program area to continue to articulate the unique program goals of the BOS and CIS degrees to students and to clearly distinguish the program description and career goals of UA's undergraduate computing degrees to students, parents, and the community. A lot of effort have been made by the previous BIT department leadership to work with UA departments with computing undergraduate degrees in an effort to clearly distinguish the program descriptions, career goals, and other important information to students and parents.
- It protects the current accreditation and leverage the strengths of the CIS and BOS degrees.

- It provides a good academic unit structure to best manage the in-demand BS CIS – Cybersecurity degree option. The CIS program area is already considering a proactive approach to terminate the BS CIS – Digital Forensics degree option to concentrate on the Cybersecurity degree option.

**Split Departments for ECE/EET and for CS/CIS/Cryptology in College of Eng. & Tech.**

The least preferred alternative is to split the current proposed department in the College of Engineering and Technology, consisting of with four huge programs (ECE, EET, CS, CIS), into two departments, and moving the BOS degree to Wayne College as a degree granting academic unit. The suggested two new departments will include the following: Department of Electrical and Computer Engineering/Electronic Engineering Technology and Department of Computer Science/Computer Information Systems/Cryptology courses. However, this alternative will disrupt the current accreditation shared by the BOS and two CIS degree options and also lead to some RTP challenges for some BIT department faculty.

Below are some charts that seek to show the strengths of BIT department and CIS program area.

**Top-10 UA Departments with the Highest Fall Headcount Trend**

| DEPARTMENT | F10 | F11 | F12 | F13 | F14 | F15 | F16 | F17 | F18 | F19 |
|---|---|---|---|---|---|---|---|---|---|---|
| **Overall (Pre-Major, Certificate, Associates, Bachelors, Masters, Doctoral, Non-Degree)** | | | | | | | | | | |
| Nursing - Instruction (CHP) | 1844 | 1887 | 1832 | 1578 | 1487 | 1557 | 1377 | 1394 | 1304 | 1272 |
| Mechanical Engineering (CoE) | 856 | 909 | 989 | 946 | 1021 | 1329 | 1359 | 1400 | 1320 | 1243 |
| **Business and Information Technology (CAST)** | **1070** | **1155** | **1208** | **1124** | **1124** | **1063** | **936** | **882** | **989** | **916** |
| Curriculum & Instruction Studies (LJFFCE) | 1939 | 1849 | 1724 | 1482 | 1184 | 1116 | 949 | 909 | 879 | 872 |
| Biology (BCAS) | 957 | 943 | 848 | 757 | 725 | 804 | 780 | 749 | 713 | 700 |
| Sports Science & Wellness Education (CHP) | 1063 | 1155 | 1220 | 1110 | 1101 | 1002 | 893 | 796 | 713 | 681 |
| Electrical & Computer Engineering (CoE) | 575 | 550 | 604 | 541 | 550 | 676 | 682 | 655 | 600 | 543 |
| Psychology (BCAS) | 745 | 790 | 703 | 630 | 587 | 592 | 530 | 540 | 528 | 538 |
| Engineering & Science Technology (CAST) | 734 | 691 | 685 | 627 | 590 | 592 | 592 | 595 | 636 | 530 |
| Marketing (CBA) | 689 | 632 | 558 | 522 | 513 | 570 | 527 | 493 | 531 | 524 |
| **Bachelors Only** | | | | | | | | | | |
| Mechanical Engineering (CoE) | 527 | 592 | 642 | 683 | 775 | 866 | 895 | 924 | 915 | 898 |
| **Business and Information Technology (CAST)** | **138** | **256** | **390** | **440** | **568** | **659** | **638** | **662** | **724** | **779** |
| Nursing - Instruction (CHP) | 466 | 599 | 638 | 629 | 607 | 658 | 624 | 593 | 574 | 558 |
| Curriculum & Instruction Studies (LJFFCE) | 841 | 877 | 906 | 841 | 719 | 659 | 570 | 564 | 514 | 523 |
| Engineering & Science Technology (CAST) | 269 | 258 | 247 | 232 | 279 | 284 | 318 | 340 | 380 | 436 |
| Biology (BCAS) | 629 | 623 | 559 | 565 | 567 | 530 | 498 | 478 | 443 | 408 |
| Electrical & Computer Engineering (CoE) | 299 | 304 | 339 | 351 | 391 | 405 | 401 | 417 | 412 | 381 |
| Marketing (CBA) | 409 | 362 | 334 | 335 | 359 | 397 | 375 | 348 | 373 | 366 |
| Psychology (BCAS) | 397 | 454 | 419 | 409 | 393 | 403 | 344 | 348 | 349 | 348 |
| Chemical, Biomolecular & Corrosion Engr (CoE) | 204 | 219 | 251 | 290 | 357 | 388 | 397 | 400 | 380 | 337 |

| DEPARTMENT | F10 | F11 | F12 | F13 | F14 | F15 | F16 | F17 | F18 | F19 |
|---|---|---|---|---|---|---|---|---|---|---|
| Accountancy (CBA) | 417 | 420 | 425 | 416 | 392 | 392 | 362 | 359 | 323 | 307 |
| Sports Science & Wellness Education (CHP) | 344 | 365 | 409 | 443 | 495 | 528 | 365 | 295 | 304 | 293 |

| BIT Dept. Fall Headcount Ranking among UA Departments | F10 | F11 | F12 | F13 | F14 | F15 | F16 | F17 | F18 | F19 |
|---|---|---|---|---|---|---|---|---|---|---|
| All Degrees and Certificates | 3rd | T-3rd | 4th | 3rd | 3rd | 4th | 4th | 4th | 3rd | 3rd |
| Bachelors | 25th | 13th | 9th | 6th | 4th | T-2nd | 2nd | 2nd | 2nd | 2nd |

## Top-13 UA Departments with the Highest Undergraduate Degree Awards Trend

| DEPARTMENT | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 |
|---|---|---|---|---|---|---|---|---|---|---|
| **Bachelors** | | | | | | | | | | |
| Nursing - Instruction (CHP) | 230 | 249 | 224 | 243 | 267 | 262 | 263 | 245 | 246 | 212 |
| **Business and Information Technology (CAST)** | **30** | **25** | **70** | **113** | **176** | **210** | **261** | **257** | **191** | **207** |
| Mechanical Engineering (CoE) | 79 | 68 | 96 | 116 | 122 | 132 | 131 | 158 | 179 | 207 |
| Curriculum & Instruction Studies (LJFFCE) | 231 | 237 | 267 | 286 | 295 | 291 | 249 | 200 | 198 | 173 |
| Sports Science & Wellness Education (CHP) | 72 | 135 | 125 | 174 | 159 | 207 | 213 | 180 | 175 | 162 |
| Biology (BCAS) | 102 | 129 | 136 | 151 | 119 | 125 | 113 | 128 | 97 | 137 |
| Marketing (CBA) | 177 | 157 | 165 | 148 | 122 | 121 | 124 | 132 | 130 | 133 |
| Engineering & Science Technology (CAST) | 100 | 136 | 105 | 112 | 95 | 111 | 99 | 106 | 110 | 113 |
| Management (CBA) | 71 | 88 | 74 | 72 | 77 | 69 | 76 | 99 | 92 | 98 |
| Psychology (BCAS) | 98 | 115 | 118 | 123 | 121 | 114 | 142 | 111 | 114 | 96 |
| Accountancy (CBA) | 130 | 117 | 132 | 135 | 119 | 120 | 115 | 110 | 110 | 96 |
| Communication (BCAS) | 220 | 261 | 221 | 212 | 188 | 142 | 135 | 115 | 132 | 84 |
| Political Science (BCAS) | 125 | 119 | 129 | 123 | 108 | 100 | 115 | 95 | 98 | 84 |

| BIT Dept. Bachelor's Degree Awards Ranking among UA Departments | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 |
|---|---|---|---|---|---|---|---|---|---|---|
| Bachelor's | T-24th | 26th | 16th | 11th | 4th | 3rd | 2nd | 1st | 3rd | 2nd |

## UA Computing Bachelor's Degree Fall Headcount Trend

| PROGRAM | F10 | F11 | F12 | F13 | F14 | F15 | F16 | F17 | F18 | F19 |
|---|---|---|---|---|---|---|---|---|---|---|
| BS Computer Engineering | 98 | 111 | 128 | 127 | 116 | 104 | 81 | 83 | 72 | 65 |
| BS Computer Engineering - Coop | 21 | 18 | 17 | 17 | 50 | 69 | 84 | 99 | 124 | 121 |
| **BS Computer Engineering TOTAL** | **119** | **129** | **145** | **144** | **166** | **173** | **165** | **182** | **196** | **186** |
| BS Computer Science - Systems | 104 | 110 | 121 | 136 | 160 | 165 | 165 | 156 | 150 | 135 |
| BS Computer Science - Management | | | | 8 | 18 | 30 | 30 | 38 | 33 | 31 |
| **BS Computer Science TOTAL** | **104** | **110** | **121** | **144** | **178** | **195** | **195** | **194** | **183** | **166** |
| **BS Computer Information Systems - Cybersecurity** | | | | | | | | | **120** | **199** |
| **BS Computer Information Systems - Digital Forensics** | | | | | | **7** | **29** | **44** | **44** | **35** |
| **BS Computer Information Systems - Networking** | **107** | **127** | **149** | **140** | **141** | **179** | **188** | **198** | **154** | **141** |
| **BS Computer Information Systems - Programming** | | | | | **11** | **28** | **50** | **94** | **106** | **129** |
| **BS Computer Information Systems TOTAL** | **107** | **127** | **149** | **140** | **152** | **214** | **267** | **336** | **424** | **504** |
| **BBA Information Systems TOTAL** | **54** | **48** | **51** | **50** | **45** | **54** | **61** | **53** | **49** | **36** |

## UA Computing Undergraduate Degree Awards Trend

| PROGRAM | 10 | 11 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 |
|---|---|---|---|---|---|---|---|---|---|---|
| BS Computer Engineering | 2 | 6 | 5 | 14 | 3 | 8 | 3 | 8 | 15 | 13 |
| BS Computer Engineering - Coop | 5 | 4 | 5 | 5 | 12 | 21 | 13 | 20 | 11 | 11 |
| **BS Computer Engineering TOTAL** | **7** | **10** | **10** | **19** | **15** | **29** | **16** | **28** | **26** | **24** |
| BS Computer Science - Systems | 18 | 23 | 28 | 30 | 32 | 32 | 37 | 41 | 40 | 31 |
| BS Computer Science - Management | | | | | 8 | 3 | 7 | 4 | 6 | 14 |
| **BS Computer Science TOTAL** | **18** | **23** | **28** | **30** | **40** | **35** | **44** | **45** | **46** | **45** |
| **BS Computer Information Systems - Cybersecurity** | | | | | | | | | | |
| **BS Computer Information Systems - Digital Forensics** | | | | | | | | | **1** | **15** |
| **BS Computer Information Systems - Networking** | **22** | **18** | **51** | **34** | **40** | **36** | **47** | **40** | **24** | **23** |
| **BS Computer Information Systems - Programming** | | | | | | **2** | **2** | **4** | **11** | **16** |
| **BS Computer Information Systems TOTAL** | **22** | **18** | **51** | **34** | **40** | **38** | **49** | **44** | **36** | **54** |
| **BBA Information Systems TOTAL** | **14** | **18** | **16** | **13** | **19** | **13** | **13** | **25** | **19** | **22** |

Note: The first BS CIS – Cybersecurity degrees are expected to be awarded in May 2020.

May 14, 2020

A meeting was held with the BIT faculty to discuss Cybersecurity and Digital Forensics in Disaster Science in CHP. The Deans of the two colleges were on the call as well.

The faculty of Disaster Science and Emergency Services unanimously voted for Cybersecurity and Digital forensics to be with the department in the College of Health Professions.

Reasons are as follows:

- While networking is an important component of cybersecurity, it is NOT the larger, holistic picture of the field. The Department of DSES includes Emergency Management and Homeland Security. Cybersecurity is under the umbrella of threat protection, infrastructure protection, threat management, and disaster management. The program is a "like" program of threat protections in which Disaster Science is comprehensively about. The world cannot separate out cyber threat protection from human, business, and disaster management. It is a part of the all hazards threat protection model under FEMA, the Federal Emergency Management Agency. There are reasons the National Guard, Ohio Cyber Reserve, and others are involved with the Cyber Range. Threat management and protection over "networks and servers".

  The following CIP code explains the larger connections within DSES:

CIP Code 43.0303

**Title:** Critical Infrastructure Protection.
**Definition:** A program focusing on the design, planning and management of systems and procedures for protecting critical national physical and cyber infrastructure from external threats, including terrorism. Includes instruction in homeland security policy, critical infrastructure policy, information security, matrix vulnerability assessment, threat assessment, physical security, personnel security, operational security, contingency planning, case analyses of specific industries and systems, redundancy planning, emergency and disaster planning, security systems, and intelligence operations.

- Cybersecurity and Emergency Management and Homeland Security have a combined certificate in Cyber Disaster Management. The department curriculum is already partnered in new ways. Many of the cybersecurity and digital forensics courses already reside in DSES.

- The population of Cybersecurity blends with the student population of DSES. The department has a large protective services and military population (many in intelligence) that are drawn to common programs in DSES. These populations understand the term and department of disaster science and would not look for such a fit under an Engineering department.

- Most important to the success of these programs is- The DSES department is student centered. Our faculty collaborate for the betterment of the students, department, and the University mission as a whole. Our meetings are enjoyable, peaceful, and helpful to each

other. Issues are solved and students are supported as necessary along their academic journey.

- Cyber Range – Continue the collaboration with the state of Ohio to develop and implement the capability to respond to and prevent cyber-attacks, provide cyber education, training, testing, competitions, and emergency preparedness

- The Industrial Control Systems Testbed – Continue the operation of the 2,000-square-foot facility, paid for by donations from the R.C. Musson and Katherine M. Musson Charitable Foundation, and Canton's Timken Foundation and the University of Akron Women's Committee. The ICS Testbed which is designed to replicate most industrial and manufacturing computer systems and cybersecurity features. Continue the work on viruses and malicious software using the facility's 40 laptop workstations in the quarantined facility, like medical researcher's working with a real virus in a high-security quarantined laboratory. Thus, determining how to protect those systems from viruses, malware, hackers, and how to recover and rebuild systems after an attack.

- DSES High Technology Forensics Laboratory and Resource Center - provides the service of examining technology in the form of digital media and electronic devices, while conducting research and program development to meet future demands and technical challenges. The methods, knowledge, and skills developed and implemented at The High Technology Forensic Laboratory and Resource Center, are then transferred to existing academic and training programs in digital forensics and cybersecurity.

- Cybersecurity, Bachelor of Science Degree - expected to qualify for such positions as law enforcement professionals, computer forensic specialists, data security analysts, systems and security administrators in government, business, information technology, and other industries.

- Digital Forensics Technology, Bachelor of Science Degree - expected to qualify for such positions as law enforcement professionals, computer forensic specialists, data security analysts, systems and security administrators in government, business, information technology, and other industries.

**Objection to the Academic Reorganization Proposal to Move the BS CIS – Cybersecurity and BS CIS – Digital Forensics degree options from the Computer Information Systems (CIS) Program to the Department of Disaster Science and Emergency Services (DSES)**

CIS and Cryptology Faculty:

- Professor Enoch Damson, Computer Information Systems, CAST
- Dr. Shirong Du, Computer Information Systems, CAST
- Dr. Zarreen Farooqi, Computer Information Systems, CAST
- Professor Janet Kropff, Computer Information Systems, CAST
- Dr. John Nicholas, Computer Information Systems, CAST
- Dr. Scott Randby, Technical Mathematics, CAST

Dear Provost Wiencek,

On Thursday, May 14, 2020, the acting dean of the College of Applied Science and Technology called a meeting at 1pm to discuss a proposal originated by the acting Dean of CAST Dean and the acting chair of the Department of Business and Information Technology (BIT). The proposal was to move BIT's BS CIS – Cybersecurity and BS CIS – Digital Forensics degree options from the Computer Information Systems (CIS) program to the Department of Disaster Science and Emergency Services.

During the meeting, all the **CIS bargaining unit faculty voted unanimously (5-0) against such a move**. It must be noted that an important faculty member and Co-Developer and Co-Director of the BS CIS – Cybersecurity and the BS CIS – Digital Forensics degree options was not invited to the meeting for reasons unknown. The meeting and the proposal was a surprise to the CIS faculty and only came up on late Wednesday, May 13, 2020 as a Microsoft Outlook invite. The meeting also included: Mike Johanyak, acting dean (CAST); Tim McCarragher, acting dean (CHP); Stacy Willet, acting chair (DSES); Stan Smith, acting chair (BIT), and Sukanya Kemp, acting associate dean (CAST).

- The CIS program consists of four current degree tracks which include the following: **BS CIS – Cybersecurity, BS CIS – Digital Forensics, AAB/BS CIS – Networking,** and **AAB/BS CIS – Programming**. It must be noted that these are not standalone degrees but degree tracks from the same program.

- The Digital Forensics degree was developed in 2012/2013 and the three developers were Dr. John Nicholas, Dr. Scott Randby and Mr. Stan Smith. It was determined that the best home for the program was as a track in the CIS degree by all three members. In 2015, the three developers began discussing the development of a Cybersecurity program. The proposal was based on benchmarks from prominent national cybersecurity degree programs. John Nicholas and Scott Randby worked with the administration at the time to successfully secure the funding that was needed to develop the program.

Below are the reasons why the CIS faculty voted unanimously against such an ill-conceived proposal.

- Per ABET and ACM, Cybersecurity is fundamentally a computing-based discipline as detailed in *Appendix A* below and because of this it belongs in a technology-based college.
- The gold standard for computing program accreditation is ABET. The ABET guidelines are based on the ACM and IEEE Computer Society report on the Computing Curricula 2020. The ABET Computing Accreditation Commission guidelines for Cybersecurity programs require **at least 45 semester credit hours (or equivalent) of computing and cybersecurity course work**.
- The CIS faculty intends to apply for ABET accreditation in the near future and the CIS faculty are the most qualified to accomplish this goal.
- The current Cybersecurity degree track is made up of the following course work:
    - **CIS (2440) courses: 54 credit hours (18 courses) – 44% of the program**
    - **Cryptology (2030) courses: 9 credit hours (3 courses) – 7%**
    - **DSES (2235) courses: 21 credit hours (7 courses) – 17%**
- The current Digital Forensics degree track is also made up of the following course work:
    - **CIS (2440) courses: 36 credit hours (12 courses) – 29% of the program**
    - **Cryptology (2030) courses: 6 credit hours (2 courses) – 5%**
    - **DSES (2235) courses: 12 credit hours (4 courses) – 10%**
    - **Criminal Justice (3800) courses: 21 credits (7 courses) – 17%**
- Due to the fact that most of the credit hours of both Cybersecurity and Digital Forensics degree options are in the CIS program, we believe these programs do not belong in DSES.
- From a student point of view, a computing degree coming out of the College of Health and Human Services would not be credible because both degrees are not health related.
- It must be noted that Dr. John Nicholas advocated for and successfully brought to The University of Akron, the second phase of the Ohio Cyber Range and developed the Industrial Control Systems Testbed based upon the Department of Homeland Security Idaho National Labs Training facility.
- Stan Smith's views do not represent that of the CIS faculty and the other faculty associated with the degrees. Yet, Stan Smith was appointed by the Dean's Office to be the acting department chair of BIT, the sole Program Director of Cybersecurity and Digital Forensics degree options (when there were three Co-Directors) without consultation of the faculty in BIT department or the CIS program. He was also appointed by the Dean's Office to be the Director of the Industrial Control Systems (ICS) Testbed to the CIS program's disagreement.

In summary, the CIS faculty are all on board with making the university as efficient as possible and because of this, we believe that moving these programs to DSES and CHP is not in the best interest of the programs or the students and it is a fundamental mistake. The faculty also believes this will negatively affect the enrollment and success of the one of the largest programs on campus as in indicated in *Appendix B*.

## Appendix A

### The Cybersecurity Discipline

**Definition of Cybersecurity as a Discipline**

According to the Curriculum Guidelines for Post-Secondary Degree Programs in Cybersecurity:

- *"A **computing-based discipline** involving technology, people, information, and processes to enable assured operations in the context of adversaries. It involves the creation, operation, analysis, and testing of secure computer systems. It is an interdisciplinary course of study, including aspects of law, policy, human factors, ethics, and risk management."* CSEC2017 (https://www.acm.org/binaries/content/assets/education/curricula-recommendations/csec2017.pdf, p 16)

According to the U.S. Department of Education's National Center for Education Statistics (NCES) Classification of Instructional Programs (CIP) Code for Computer and Information Systems Security/Auditing/Information Assurance (11.1003 from which Cybersecurity was drawn)

- "*A program that prepares individuals to assess the security needs of computer and network systems, recommend safeguard solutions, and manage the implementation, auditing, and maintenance of security devices, systems, and procedures. **Includes instruction in computer architecture, programming, and systems analysis; networking; telecommunications; cryptography; security system auditing and design**; applicable law and regulations; risk assessment and policy analysis; contingency planning; user access issues; investigation techniques; and troubleshooting*" (https://nces.ed.gov/ipeds/cipcode/CIPDetail.aspx?y=56&cipid=89589)

**Computing Disciplines**

The Computing Curricula 2020: Draft Report (https://www.cc2020.net) has recently added two more computing disciplines (**Cybersecurity** and **Data Science**) to the five disciplines in the Computing Curricula 2005: The Overview Report (https://www.acm.org/binaries/content/assets/education/curricula-recommendations/cc2005-march06final.pdf) indicated below:

- Computer Engineering
- Computer Science
- Information Systems
- Information Technology
- Software Engineering

**Emergence of Cybersecurity as a Discipline**

"While cybersecurity is an interdisciplinary course of study including aspects of law, policy, human factors, ethics, and risk management, **it is fundamentally a computing based discipline**. As such, and as depicted in Figure 2, **academic programs in cybersecurity are both informed by the interdisciplinary content, and driven by the needs and perspectives of the computing discipline that forms the programmatic foundation**." CSEC2017, p 17

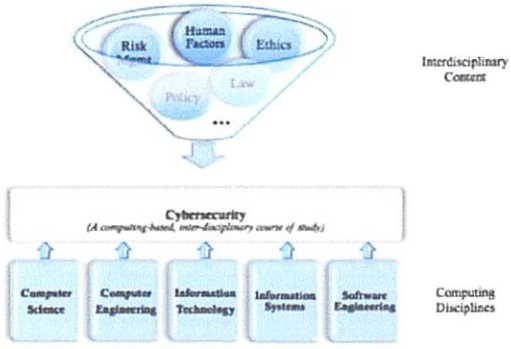


*Figure 2.* Structure of the cybersecurity discipline.

## Characteristics of a Cybersecurity Program

Each graduate of a cybersecurity program of study should have a cybersecurity curriculum that includes:

- A **computing-based foundation (e.g., computer science, information technology),**
- Crosscutting concepts that are broadly applicable across the range of cybersecurity specializations (e.g., cybersecurity's inherent adversarial mindset),
- A body of knowledge containing essential cybersecurity knowledge and skills,
- A direct relationship to the range of specializations meeting the in-demand workforce domains, and
- A strong emphasis on the ethical conduct and professional responsibilities associated with the field.

CSEC2017, p 17

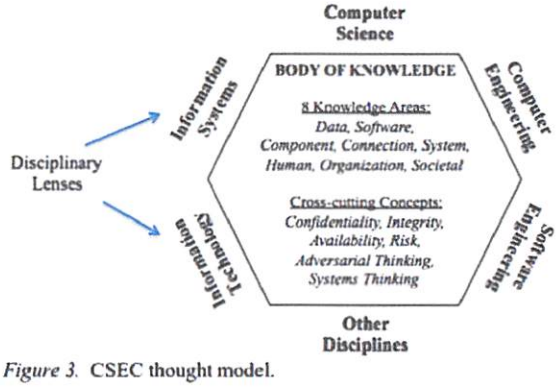


*Figure 3.* CSEC thought model.

## Cybersecurity Knowledge Areas

Each graduate of a cybersecurity program of study should have a cybersecurity curriculum that includes:

- Data Security
- Software Security
- Component Security
- Connection Security
- System Security
- Human Security
- Organizational Security
- Societal Security

**ABET Computing Accrediting Commission (CAC) Guidelines for Cybersecurity Curriculum**

The ABET CAC Guidelines for Computing Programs (https://www.abet.org/wp-content/uploads/2018/11/C001-19-20-CAC-Criteria-11-24-18.pdf, pp 8-9) specifies the following curriculum requirements for Cybersecurity programs.

These requirements are:

a) **At least 45 semester credit hours (or equivalent) of computing and cybersecurity course work**. The course work must include:
   1. Application of the crosscutting concepts of confidentiality, integrity, availability, risk, adversarial thinking, and systems thinking.
   2. Fundamental topics from each of the following:
      a. Data Security: protection of data at rest, during processing, and in transit.
      b. Software Security: development and use of software that reliably preserves the security properties of the protected information and systems.
      c. Component Security: the security aspects of the design, procurement, testing, analysis, and maintenance of components integrated into larger systems.
      d. Connection Security: security of the connections between components, both physical and logical.
      e. System Security: security aspects of systems that use software and are composed of components and connections.
      f. Human Security: the study of human behavior in the context of data protection, privacy, and threat mitigation.
      g. Organizational Security: protecting organizations from cybersecurity threats and managing risk to support successful accomplishment of the organizations' missions.
      h. Societal Security: aspects of cybersecurity that broadly impact society as a whole. 3. Advanced cybersecurity topics that build on crosscutting concepts and fundamental topics to provide depth.
   3. Advanced cybersecurity topics that build on crosscutting concepts and fundamental topics to provide depth.

b) **At least 6 semester credit hours (or equivalent) of mathematics that must include discrete mathematics and statistics**.

**References**


Association for Computer Machinery (ACM) Undergraduate Computing Curricula Guides (https://www.acm.org/education/curricula-recommendations)

- Computing Curricula 2020: Draft Report (https://www.cc2020.net)
  - Computer Engineering (https://www.acm.org/binaries/content/assets/education/ce2016-final-report.pdf)
  - Computer Science (https://www.acm.org/binaries/content/assets/education/cs2013_web_final.pdf)
  - Information Systems (https://www.acm.org/binaries/content/assets/education/curricula-recommendations/is-2010-acm-final.pdf)
  - Information Technology (https://www.acm.org/binaries/content/assets/education/curricula-recommendations/it2017.pdf)
  - Software Engineering (https://www.acm.org/binaries/content/assets/education/se2014.pdf)
  - **Cybersecurity (https://www.acm.org/binaries/content/assets/education/curricula-recommendations/csec2017.pdf)**
  - **Data Science**
- Computing Curricula 2005: The Overview Report (https://www.acm.org/binaries/content/assets/education/curricula-recommendations/cc2005-march06final.pdf)

ABET Computing Accreditation Commission 2019-2020 Guidelines for Computing Programs (https://www.abet.org/wp-content/uploads/2018/11/C001-19-20-CAC-Criteria-11-24-18.pdf)

U.S. Department of Education's National Center for Education Statistics (NCES) Classification of Instructional Programs (CIP) Code (https://nces.ed.gov/ipeds/cipcode/browse.aspx?y=56)

## Appendix B

### UA Computing Bachelor's Degree Fall Headcount Trend

| PROGRAM | F10 | F11 | F12 | F13 | F14 | F15 | F16 | F17 | F18 | F19 |
|---|---|---|---|---|---|---|---|---|---|---|
| BS Computer Engineering | 98 | 111 | 128 | 127 | 116 | 104 | 81 | 83 | 72 | 65 |
| BS Computer Engineering - Coop | 21 | 18 | 17 | 17 | 50 | 69 | 84 | 99 | 124 | 121 |
| **BS Computer Engineering TOTAL** | **119** | **129** | **145** | **144** | **166** | **173** | **165** | **182** | **196** | **186** |
| BS Computer Science - Systems | 104 | 110 | 121 | 136 | 160 | 165 | 165 | 156 | 150 | 135 |
| BS Computer Science - Management | | | | 8 | 18 | 30 | 30 | 38 | 33 | 31 |
| **BS Computer Science TOTAL** | **104** | **110** | **121** | **144** | **178** | **195** | **195** | **194** | **183** | **166** |
| **BS Computer Information Systems - Cybersecurity** | | | | | | | | | **120** | **199** |
| **BS Computer Information Systems - Digital Forensics** | | | | | | **7** | **29** | **44** | **44** | **35** |
| **BS Computer Information Systems - Networking** | **107** | **127** | **149** | **140** | **141** | **179** | **188** | **198** | **154** | **141** |
| **BS Computer Information Systems - Programming** | | | | | **11** | **28** | **50** | **94** | **106** | **129** |
| **BS Computer Information Systems TOTAL** | **107** | **127** | **149** | **140** | **152** | **214** | **267** | **336** | **424** | **504** |
| **BBA Information Systems TOTAL** | **54** | **48** | **51** | **50** | **45** | **54** | **61** | **53** | **49** | **36** |

### UA Computing Undergraduate Degree Awards Trend

| PROGRAM | 10 | 11 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 |
|---|---|---|---|---|---|---|---|---|---|---|
| BS Computer Engineering | 2 | 6 | 5 | 14 | 3 | 8 | 3 | 8 | 15 | 13 |
| BS Computer Engineering - Coop | 5 | 4 | 5 | 5 | 12 | 21 | 13 | 20 | 11 | 11 |
| **BS Computer Engineering TOTAL** | **7** | **10** | **10** | **19** | **15** | **29** | **16** | **28** | **26** | **24** |
| BS Computer Science - Systems | 18 | 23 | 28 | 30 | 32 | 32 | 37 | 41 | 40 | 31 |
| BS Computer Science - Management | | | | | 8 | 3 | 7 | 4 | 6 | 14 |
| **BS Computer Science TOTAL** | **18** | **23** | **28** | **30** | **40** | **35** | **44** | **45** | **46** | **45** |
| **BS Computer Information Systems - Cybersecurity** | | | | | | | | | | |
| **BS Computer Information Systems - Digital Forensics** | | | | | | | | | **1** | **15** |
| **BS Computer Information Systems - Networking** | **22** | **18** | **51** | **34** | **40** | **36** | **47** | **40** | **24** | **23** |
| **BS Computer Information Systems - Programming** | | | | | | **2** | **2** | **4** | **11** | **16** |
| **BS Computer Information Systems TOTAL** | **22** | **18** | **51** | **34** | **40** | **38** | **49** | **44** | **36** | **54** |
| **BBA Information Systems TOTAL** | **14** | **18** | **16** | **13** | **19** | **13** | **13** | **25** | **19** | **22** |

**Note**: The first BS CIS – Cybersecurity degrees are expected to be awarded in May 2020.

**Appendix 8**

**Wiencek,John M.**

---

**From:** Lenhart,Lisa A
**Sent:** Tuesday, May 12, 2020 10:16 AM
**To:** Wiencek,John M.
**Cc:** Tudor,Jarrod; Makki,Nidaa
**Subject:** Reorganization

Provost Wiencek,

I am writing to let you know the faculty in the LJFF College of Education have had a great deal of discussion about the best fit for our college as the University reorganizes. On Friday we had a faculty meeting which provided the opportunity to deliberate amongst ourselves. Informal polls conducted on both Friday and again Monday showed the faculty is open to making either college work, with the majority preferring to join the College of Arts and Sciences. The priority of college is staying together as one unit. It should be noted that retiring/resigning faculty were part of this conversation and poll.

The LBJFF College of Education, and particularly the Department of Curricular & Instructional Studies, has one of the highest headcounts on campus among departments. As we continue to admit students -- we are welcoming 33 full-paying graduate students this summer alone-- we look forward to continuing to contribute to the University as a whole and with whatever college we join.

I am copying Dr. Nidaa Makki on this email, as she represents us on Faculty Senate and is on the Executive Committee.

Please let me know how I can help in the reorganization process to create the best outcome for all involved.

Sincerely,
Lisa Lenhart

Lisa A. Lenhart, PhD
Professor
Interim Dept. Chair
LeBron James Family Foundation College of Education
The University of Akron

Appendix 9

*THE*
*UNIVERSITY*
*OF*
*AKRON*

Department of Biology
Auburn Science Complex
235 Carroll St. D401, Campus Mail 3908
Phone: 330-972-7155
FAX: 330-972-8445

**M E M O R A N D U M**

DATE: Monday, May 12, 2020

TO: Dr. John Wiencek, Provost

FROM: Biology Faculty

SUBJECT: College of Polymer Science and Polymer Engineering

Dear Dr. Wiencek:

We are writing to express our concern about the current reorganization plan that dissolves the College of Polymer Science and Engineering (CPSPE). We are sure you are aware of the history and current status of CPSPE as a world-renowned research and training institution that is widely recognized and an iconic symbol of UA and Akron. Especially in light of the financial challenges facing us, we believe the plan will compromise the following key functions of CPSPE for the Department of Biology and UA overall:

1. Need to maintain UA's key distinction from regional competition to recruit undergrad students. Polymer name recognition is huge.
2. Research access for undergraduates is a key focus within biology for competition for the best pre-health students. Much of that research is in collaboration with or leverages CPSPE resources (e.g., people, knowledge, equipment, reputation).
3. CPSPE research is key to regional economic recovery (genesis of the ~1000 polymer startups in the area)

The above three consequences will severely diminish UA's ability to carrying out two of the four overarching recommendations of the strategic working group:

1. Increased research and training in high demand areas such as engineering, technology and health professions
2. Increased external partnerships with regional businesses

We believe finding new ways to balance the costs and benefits of CPSPE that preserve its identity and cohesion will provide more leverage for UA to reverse its current academic and financial weaknesses so that we can emerge as a distinctive public urban research university.

Department of Biology Faculty vote: 14 in favor, 0 opposed, 0 abstentions

May 13, 2020

**Department of Chemistry Comment on "Reorganization of College Structures at The University of Akron"**

Dear Provost Wiencek,

The Department of Chemistry is very concerned about the proposal of the Faculty Senate Executive Committee that incorporates the faculty of the College of Polymer Science and Polymer Engineering (CPSPE) into the Chemistry and Chemical Engineering Departments. We believe that the mission of the University of Akron (UA) is best served if CPSPE remains together as one unit, as the term "Polymer Science & Polymer Engineering" is intuitively associated with our university and historically binds UA with Akron and Northeast Ohio. In addition, CPSPE provides to the university a local, national, and international recognition in the field of polymer science and polymer engineering. We all benefit from this distinction, whether we are directly affiliated with CPSPE, collaborate with CPSPE faculty, or are just a member of our great university.

Equally important, the plan to appoint polymer science and engineering faculty in the Department of Chemistry does not align with our mission as a Department. Our Department focuses on providing both undergraduate and graduate chemistry education, across all chemistry fields required by chemistry and biochemistry majors, as well as to majors in the fields of engineering and bioscience (pre-med/pharmacy/dentistry). Furthermore, the Department of Chemistry is invested in a very strong graduate research program across a broad spectrum of chemical and biochemical sciences, with competitive federal grants from NSF and NIH to support research and education efforts totaling $9,903,873 for the 2015–2020 period. It is the breadth and balance of our Department among the areas of Analytical Chemistry, Organic Chemistry, Inorganic Chemistry, Physical Chemistry, and Biochemistry in both undergraduate and graduate research and education that allow us to fulfill our mission to provide fundamental chemistry knowledge and chemistry research opportunities to a large number of our students. We endeavor to maintain this ability and important contribution to the university's educational goals.

Our Department understands the challenging financial issues facing our university and we will be happy to welcome as "joint title" any chemist in the College of Polymer Science and Polymer Engineering, so that they can contribute to our university's educational mission.

We kindly request that you consider all the impacts the proposed changes might have, which do not align with our mission to provide excellent chemistry and biochemistry education and research opportunities to the UA students, while attracting many new high school graduates from UA's international reputation as an urban research school.

Respectfully,

Chemistry faculty