

# COLLEGE OF ENGINEERING FACULTY ORGANIZATION (CEFO)

## MEETING MINUTES

Tuesday, January 23, 2024, 11:30 AM

Lunch available at 11:30 AM

EPIC G287

The following individuals signed the attendance sheet:

Sid Alvis, Yawo Amengonu, Ahmed Arafa, Yamilka Baez-Rivera, Cathy Blat, Anthony Bombik, Nan BouSaba, Tara Cavalline, Valentina Cecchi, Shen-En Chen, Don Chen, Youxing Chen, Harish Cherukuri, Michelle Demers, Gretchen Dietz, Ahmed El-Ghannam, Terence Fagan, Kosta Falaggis, Wei Fan, Wei Gao, Christopher Green, Courtney Green, John Hall, Meg Harkins, Mohamad-Ali Hasan, Tao Hong, Simon Hsiang, Olya Keen, Rob Keynton, Lisa Lattimore, Kevin Lawton, Churlzu Lim, Kevin Lindsay, Dipankar Maity, Jose Martins, Brigid Mullany, Sherman Mumford, Mariya Munir, Asis Nasipuri, Dave Naylor, John Nettles, David Newell, Jaewon Oh, Ertunga Ozelkan, Jayaraman Raja, Praveen Ramaprabhu, Jeff Raquet, Bienvenido Rodriguez-Medina, William Saunders, Steve Schmid, Ali Sears, Sam Shue, Ron Smelser, Kamia Smith, Stuart Smith, Linguang Song, Tyler Stover, Mei Sun, Brett Tempest, Lutfi Tunc, Mesbah Uddin, Regina Vrikkis, Qiuming Wei, Matthew Whelan, Wesley Williams, Artur Wolek, Linda Xie, Terry Xu, In Yang, Ran Zhang, HaiTao Zhang, Qiang Zhu, Qiang Zhu

The following individuals attended and presented but did not sign the attendance sheet:

Aidan Browne and Jim Conrad.

(75 attendees)

### AGENDA:

#### 1. Welcome from CEFO President Jim Conrad

Jim Conrad called the meeting to order at 11:39 AM and introduced the agenda. There were no objections to accepting this agenda, and the meeting moved forward.

#### 2. Minutes from the last CEFO meeting (November 28, 2024)

CEFO Secretary Kosta Falaggis presented the minutes from the last CEFO meetings.

He mentioned that after he had sent out the minutes to the faculty members, he made one correction (he needed to address one faculty member with the correct title). This was the only correction to the minutes. Other than that, there were no differences between the minutes and those on the CEFO faculty website presented at the meeting.

There were no objections to that change and the minutes. The minutes were approved.

#### 3. Short remarks from CEFO President Jim Conrad

The Chair acknowledged the faculty's critical role in governance and academic excellence, per the Faculty Constitution. He underscored faculty responsibilities in ensuring high-quality instruction and research and highlighted the importance of active participation in CEFO and curriculum discussions.

An update on the Assistant Professors' eligibility to chair dissertation committees is forthcoming from the Associate Deans.

#### **4. Voting Mechanisms – Terence Fagan**

Terence Fagan reported on the Voting Ad Hoc Committee's progress, which was formed to evaluate CEFO's voting practices, including proxy and absentee voting considerations. The committee seeks to balance efficiency with inclusivity in voting processes. The committee, comprising Ed Morse, Michelle Demers, and Terence Fagan, was formed to examine voting practices within the College of Engineering Faculty Organization (CEFO), particularly focusing on the feasibility of proxy voting due to faculty absences at meetings.

The committee's initial meeting took place on January 19, 2024, aiming to address several key questions.

The formation of the committee for voting practices, or better practices, was initiated due to initial queries regarding the method of voting on various topics, the significance of those topics, whether long-term or short-term and the procedure for such decisions. Three distinct question groups were formed to discuss aspects, including proxy votes, different voting classes based on the severity of discussions and topics, and proxy and absentee votes.

Given the many tasks on the agenda, the desire to keep the update concise was expressed. There was an open invitation for more participation, emphasizing the critical nature of voting methods from a collegiate perspective.

The speaker mentioned that the voting committee met the week before. During the meeting, topics such as Robert's rules, electronic balloting, and whether it equates to paper balloting were discussed, and the importance of voting structures was addressed.

The speaker questioned whether anonymity should be preserved in all voting matters. He mentioned that discussions ensued within the Ad hoc committee on which voting classes are deemed necessary, for instance, approving minutes, which, in the speaker's view, could be conducted without electronic voting and instead by show of hands. Conversely, matters like the first-year curriculum necessitated a deeper understanding of the collective intention of the faculty, with possible tools being suggested for this purpose. Feedback from the CEFO faculty was sought, with a preference for receiving it via email or personal conversations post-meeting rather than after this presentation. The necessity of providing a brief update and the decision to proceed with the committee's efforts were communicated, underlining the importance of keeping the assembly informed of progress.

#### **5. Dean's update by Dean Robert Keynton**

The Dean extended New Year greetings and appreciation for the faculty's efforts as the new semester began, highlighting the recent insights into the budget and performance budgeting that would influence later discussions:

- A comparison of scheduled credit hour rates for R2 institutions was provided, underscoring engineering's position as one of the highest at \$860 per undergraduate credit hour. Given its impact on state funding, increasing engineering enrollment was emphasized despite tuition remaining constant for students.
- The Dean reviewed the enrollment metrics and their impact on budgeting, noting a drop in enrollment for the year compared to the previous period, which resulted in a significant

- financial shortfall. However, this was partially mitigated through performance metrics improvements, such as the four-year graduation rate and degree efficiency.
- In particular,
    - The university experienced lower enrollment than the previous year, resulting in a loss of \$5.85 million.
    - A significant portion of the financial loss was recouped through improved performance scores. Key performance metrics include: (i) Four-year graduation rate (uniform across the system), (ii) Undergraduate degree efficiency, (iii) First-time student debt, and (iv) Transfer at graduation and related expenses.
    - As an institution, we also chose the four-year graduation rate for Hispanic/Latino students as a criterion, where we scored 2.11% out of a possible range of -3% to +3% for the year.
    - For the academic year 2024-25, based on the previous year's numbers, an increase of 2.46% is expected.
  - Future budget projections anticipate that
    - Despite not having precise enrollment numbers, the budget is expected to break even without significant financial gains for 2022.
    - For 2025-26, a drop in undergraduate efficiency is anticipated, which could reduce the maximum score by -1.1%.
    - Calculations for education-related expenses per degree are still pending. These will help approximate the total weighted percent score for future budget planning.
    - Efforts aim to ensure operations yield positive outcomes by supporting students to graduate on time. Dean Keynton emphasized that the common first-year is one of those measures to improve those metrics that will increase retention.
    - Looking ahead, the Dean discussed projections for the 2024-2025 academic year, including anticipated improvements in performance metrics and the potential budget implications.
    - The Common First Year program was highlighted as a strategic initiative to increase retention and recruitment, aiming to make UNC Charlotte more attractive to prospective students.
    - Funding from Engineering North Carolina's future was addressed, with the Dean expressing disappointment over receiving only a portion of the requested funds. The college received \$2 million, but \$1 million goes towards the cluster hire. Nonetheless, investments were made in recruitment and advising, including hiring two new college-level recruiters and an open search for two new professional academic advisors to enhance student support and faculty focus on teaching.
    - A recruitment budget of \$30,000 was allocated to enhance faculty engagement beyond teaching activities.
  - Confirmation was received from financial aid that up to 30 hours of prerequisite courses will be covered.
  - This coverage goes beyond the 120-hour limit of the degree program, addressing debates about financial aid restrictions.
  - The Dean concluded with updates on philanthropic contributions, notably a significant donation from Duke Energy to support summer bridge programs, senior design projects, and efforts to establish a center for academic resources, underscoring the comprehensive approach to improving student success and retention.

## **6. Common First-Year Updates by Aidan Browne**

Aidan Browne presented the updates on the common first-year curriculum. The session aimed to allocate sufficient time to discuss the CFY program, avoiding the rush in previous meetings.

He outlined the timeline for CFY Implementation and ...

- Emphasized the importance of informing admissions and marketing for the incoming Fall 2025 freshmen about the CFY program by February/March.
- Detailed the timeline from Spring for admissions preparation to Fall '24 and Spring '25 for curriculum proposals and course development.
- Departments would engage in course planning and preparation for the CFY program to ensure readiness for Fall '25 implementation.

Aidan Browne also gave a quick overview of the previous curriculum development for CFY. The curriculum for CFY is structured around engineering, math, science, and general education courses. The CFY curriculum introduces new courses to expose students to various engineering disciplines and essential skills for success. The math sequence was designed to be customized to individual student levels determined by placement tests. He highlighted the flexibility for students to declare or confirm their intended major by the second semester, with options to change their decision. The program is designed to be adaptable, accommodating students with varying math backgrounds and allowing for part-time progression. He gave an overview of the contents of each of those new courses and presented a draft of the motion of the CFY curriculum.

Aidan Browne also created a public website with a feedback mechanism to share information and CFY program updates. There were plans for further discussion sessions and a feedback mechanism for faculty input.

One faculty member asked what the practical implication was of the students choosing their target major as planned. Aidan Browne and the Dean emphasized the importance of flexibility and student choice. They highlighted feedback indicating that students and parents value the ability to choose and potentially change majors without penalty. This approach aims to accommodate students who are certain about their major from the outset and those who may wish to explore different engineering disciplines before deciding. The goal is to enhance the sense of belonging and ensure all students can make informed choices about their educational paths, fostering a more adaptable and student-centered engineering education at UNC Charlotte.

One faculty member asked regarding the participation of the Construction Management and Fire Safety majors. The discussion clarified that these majors are excluded from the Common First Year program due to their curriculum's reliance on algebra rather than calculus as it is the case in other calculus-based engineering disciplines. The conversation revealed that these majors had not been part of the initial planning for the program. However, there was a mention of the potential for students in these excluded majors to participate in specific Common First Year program classes if desired, subject to coordination with the Dean's office. This arrangement would not integrate them fully into the program but would allow for some level of participation in selected coursework.

One faculty member asked if some students are taking courses part-time, and if they don't take those general education courses, does that keep them from continuing? Aidan Browne responded that this is a complex answer, but they must take general education courses for several reasons. They must get

through the 30 credits not to be a freshman anymore, and there are existing progression requirements. We have progression requirements right now, and changing those progression requirements is not part of the first year.

Another faculty member asked about transferring students with associate degrees and said that four courses of the common first-year curriculum are unavailable at community colleges. Aidan Browne highlighted that the committee did their best to align the CFY curriculum with North Carolina's articulation agreements, ensuring that transfer students could receive credit for equivalent courses. This problem is to be solved by future committees implementing the CFY courses' syllabus. The intention is to show an example of a path for students to get transfer credits. He acknowledged that addressed the complexities of transfer scenarios, including those completing degrees elsewhere or coming from out-of-state, emphasizing the university's adaptability in recognizing equivalent coursework. Another faculty member gave an example of CSC 134, which their program accepts as a C++ course. Jim Conrad emphasized the need for recruiters at community colleges to advise the students appropriately.

One faculty member brought up the potential challenges with students selecting their target major, including the hypothetical scenario of disproportionate interest in specific departments. Aidan Browne noted that while the current system allows flexibility, administrative adjustments might be necessary to balance departmental enrollments. The faculty member reiterated the importance of clearly communicating to students the chances of being accepted into their chosen major because simply declaring the major should not mean admitting them to that given major. Dean Keynton mentioned that the students currently declare their major, but there are GPA requirements to be accepted as a sophomore into a given program. Another hypothetical scenario was discussed where all students have a GPA of 3.7, and it is impossible to cut the numbers off. Aidan Browne mentioned that we hope for statistical distribution, but if that happens, Dean Keynton's task is to solve that problem.

One faculty member commented on the Common First Year (CFY) curriculum's math component, highlighting the flexibility within the math sequence to accommodate students from various majors. It was acknowledged that some engineering majors require algebra-based math while others necessitate calculus-based courses. This flexibility allows students to progress through math courses (algebra, precalculus, calculus I, II, III) tailored to their needs and their intended major's requirements. A scenario was presented where a student might need to transition between majors with different math requirements, potentially facing a dilemma if moving to a major that requires a higher level of math than they have completed. Aidan Browne discussed a possible solution that emphasizes student choice and adaptability; students aiming to switch majors and meet the required math level might need to take additional courses over the summer to remain on track for a four-year graduation timeline. Alternatively, they may choose not to do that and increase the time to graduation. Furthermore, with the implementation of the ALEKS placement test moving to May, students will have earlier knowledge of their math placement, allowing them to make informed decisions about summer courses to bridge gaps. This approach underscores a commitment to flexibility and supports students in navigating their educational paths, even when their initial major choice or math level changes.

One faculty member raised concerns about the timeline for departments to thoroughly consider and implement required changes to their curricula in response to the CFY program. While departments have been involved in discussions for a year, some faculty expressed the need for more time to assess the implications for subsequent years and ensure the changes align with departmental objectives. The time until February 20 may not be sufficient for the department to think very thoroughly about making these required changes to the curriculum for the subsequent years. Aidan Browne responded that no department has to make any decisions on the curriculum at all. The only decision we generally have to

make is that we're far enough from here and that we believe in this. He emphasized that departments don't have to have that curriculum adjusted until a whole year later, Fall 2026.

The faculty member emphasized that we must understand how the CFY will impact our curriculum. He expressed his concern about simply saying “yes” only to find out later that there are huge ramifications to our future course offerings or objectives. This also impacts the faculty members, and there is not enough time to make a huge decision about their career in less than one month.

During the discussion, the CEFO President interjected to indicate that the meeting had reached its time limit, effectively bringing the conversation to a close.

## **7. Closing**

The meeting concluded with a reminder for faculty to engage in upcoming discussions on the CFY program through brown bag sessions and feedback channels. All agenda items were addressed, and the meeting adjourned at 12:44 PM