ECE Undergraduate Core Courses Committee Meeting
Thursday, October 25th, 2023

Attending: Arabshahi , Hameed, Makhsous, Mamishev, Overly, Shepard, Wilson (Chair)

Agenda:
1. Review of Previous Meeting Minutes for Approval
2. Discussion of EE 393 and Overall ECE Writing Requirements
3. Discussion of EE 393 and the overall writing requirement for ECE degree

Minutes of October 11th: Approved

Discussion regarding current format and teaching of EE 393

Mamishev joined the meeting to inform the committee of how EE 393 is currently taught. Prior to the 2022-2023 academic year, the course was taught in two 32 student sections, with students also able to take ENGR 333: Advanced Technical Communication in the Engineering Workplace as an alternative to satisfy the Advanced Technical Communication requirement in both he BSEE and BSECE degrees. With the growth of the department, and the departure of the course's previous instructor, Mamishev agreed to teach the course, and is now in his fourth quarter as the instructor for EE 393.

- To accommodate the larger number of students needed by the department each quarter, the structure uses a main lecture for up to 100 students, with additional small quiz sections led by TAs for more individualized writing and project instruction.
    - This is not ideal for the instruction of writing.
- Mamishev has made adjustments to how he has taught the course to address necessary ABET outcomes, as well as satisfy the University's requirements courses that satisfy its own writing requirement and receive a "W" designation.
- Arabshahi pointed out the course evaluations have been fairly good for a writing course in our department.
- Course uses some complex, independently created software. Initial uses of the software were somewhat buggy, but issues have been fixed and students are happier.
- Course starts with smaller "portions" of assignment that are then used later in larger project(s).
- Assigns students to projects groups based on their interests to provide a more interesting and contextual learning experience.
- Final project is a group-written paper.
    - Each student must write their own initial introduction to the paper, after which the introduction is revised through a group process.
- Course structure stresses working in groups and working through issues raised in a collaborative environment.
    - Simulates the real-world workforce into which they are likely to enter upon graduation.
    - Overly mentioned that this would seem to be strong preparation for the capstone courses, and would be best if a way could be found to ensure students take the course prior to the final capstone quarter.
- When asked about preparation students need for the course, Mamishev stated the ENGR 231 was a prerequisite
    - Mamishev stated his belief that students do not seem to find ENGR 231 valuable, which impacts their view when they enter the course.
    - Students find there is too much overlap in writing courses.

- o At the start of the course, Alex expresses to students that EE 393 will not overlap with other writing courses and will introduce them to real-world skills they will need when they enter industry.

Discussion of EE 393 and Overall ECE Writing Requirements
With the phasing out of writing offerings through the College of Education, and with particular focus on ENGR 231 and ENGR 333, Wilson asked for discussion on how students in the BSEE and BSECE will be able to satisfy a writing requirement, and what changes needed to be made to the degree requirements in both programs.
- Wilson provides outline of BSEE and BSECE writing requirement:
  - o English Composition (all students have upon entering ECE)
  - o ENGR 231: Advanced Technical Communication in the Engineering Workplace
  - o Either EE 393 or ENGR 333
- The College of Engineering will stop teaching writing courses starting Autumn 2024, and ECE needs to quickly find a way for students to achieve the writing credits required for all UW undergraduates, as well as provide the writing and communication skills the department believes its students need to be successful electrical and computer engineers.
  - o In spring 2023, the department piloted a "Writing Studio" alternative for EE 393
    - ▪ To continue, this would need a strong instructor.
  - o Department needs options for ENGR 231 replacement
  - o One option is to increase scope of EE 398: Introduction to Professional Issues as an option for EE 393
- Shepard provided a student perspective
  - o Students want to get into the "engineering content" once they are finally in the major
  - o Students often have a negative sentiment regarding writing

Discussion table for time, and will need further exploration by the committee