ECE Curriculum Committee Meeting Wednesday, May 25th, 2022

2022Attendance: Arabshahi, Chen, Elberier, Kirschen, Moritz, Overly, Riskin, Swanson, Sykes, Vardhan, Wilson

Minutes from meeting of May 18th, 2022: Approved

Agenda:

- 1. Annual ABET Review of the Sustainable Power Systems and the Power Electronics and Drives concentrations (Kirschen)
- 2. Annual ABET Review of the Communications Concentration (Arabshahi)

Annual ABET Review of the Sustainable Power Systems and the Power Electronics & Drives (Kirschen) (See Slides)

Kirschen presented the annual ABET review for the Sustainable Power Systems and the Power Electronics & Drives concentrations. See slides for main review.

- Enrollment in Power courses remain healthy, though enrollments have dropped for 351 and 456 over past couple of years.
- EE 351 was moved from two offering to just one for the 2021-2022 academic year.
 - Sykes wondered if it might be possible to offer 351 in winter instead of spring if it is only going to be offered once a year. There are not many electives for students in the winter, and EE 351 might get better enrollment if it were to be offered in winter. Kirschen agreed to consider it.
 - Kirschen mentioned that the group was considering splitting the lab component to a different course. Hauck wondered if that would lead to student often getting less depth in the subject. Kirschen agreed that possibility would need to be examined.
- EE 456 has also seen declining enrollment. With Rich Christie no longer available to teach, there
 is the option of no longer offering the course as the course appears to have dropped below the
 enrollment threshold to remain viable.
 - Overly asked if it might be possible to keep the course as a capstone and add a graduate section to keep enrollment up. The department has already lost a number of individual capstones and Overly believed that relying more and more on ENGINE may be decreasing student flexibility as it is a two-quarter option leaving one less elective slot in student schedules. Kirschen said this might be possible.
 - The committee discussed the issue of students having to register for EE 497 for winter before the end of the autumn quarter and having a chance to learn about the concentration capstone options. Once students have started EE 497 in winter, they are locked into ENGINE as their capstone since they will not get credit for EE 497 if they do not also complete EE 498 in spring. ENGINE has also grown extremely large and has become more difficult to manage, with changes needed, such as reconfiguring the pitch event. The committee agreed that a look at ENGINE and the capstone programs will be an important topic to examine at the start of the next academic year.

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Annual ABET Review of the Communications concentration (Arabshahi)

(See Slides)

Arabshahi presented the annual ABET review for the Communications concentration. See slides for main review.

- Enrollment in courses has been healthy, though EE 417 was slightly weaker even with joining it with a graduate section of EE 506.
- EE 419 had an unusual dip in enrollment this year, but it is usually a healthy course.
- All end-of-quarter reviews were complete aside from EE 419 in spring 2020.
- ABET outcomes look strong.
- EE 420 was not offered this past year, and Communications students were required to use the ENGINE capstone. The future or EE 420 is being determined, with a desire to offer it again. It is a fun project course that was recently re-designed to use inexpensive resources.
- EE 418 was recently approved to increase from 3 to 4 credits to better reflect the amount of work students were putting into the course.
- 2 new courses were approved, EE 465 and EE 467, with EE 468 redesigned. The 3 courses will be used the Cryptosecurity pathway in the new BSECE curriculum.