

ECE Curriculum Committee Meeting

Monday, May 18th, 2022

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

Minutes from meeting of May 11th, 2022: Approved – with requested edits

Agenda:

1. Consent Agenda
 - Proposal to remove EE 433 as prerequisite for EE 437
 - Proposal to remove EE 433 as required course for Integrated Systems concentration
2. Annual ABET Review of Controls Concentration (Burden)

Consent Agenda

- **Item 1:** Proposal to remove EE 433 as prerequisite for EE 437
([See Proposal](#))
Approved: No dissents
- **Item 2:** Proposal to remove EE 433 as required course for Integrated Systems concentration
([See proposal](#))
Approved: No dissents

Annual ABET Review of Controls Concentration (Burden)

([See slides](#))

Burden presented the annual ABET review for the Controls concentration. See slides for main review.

- After 2019, EE 448 and EE 449 were no longer used as a capstone for the concentration, and those courses have not been taught since, with ENGINE becoming the only option for the capstone.
- There have been a strong group of Controls projects in the ENGINE capstones.
- Starting in 2019, the group started offering EE 447 twice a year in fall and spring. This was a result of a desire to decrease the class size. Splitting the course has made the course more manageable while still averaging about 70 students per year.
- The concentration is the “lightest” of the concentrations with the smallest number of required courses. With the new curriculum coming online for the BSECE degree on autumn 2022, there is room to grow.
- There is a desire in the group to revise EE 448 into a data-driven controls “lab.” (See slide) This is a course that might be of interest to Machine Learning and Embedded pathways in the new curriculum.
- There is a desire to have a Controls option in the Computing pathway.
 - EE 233 is a helpful course in controls, but not essential, so a course could be used. EE 242 & EE 342 provide required background and will still be essential.

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- Kirschen noted his surprise that EE 233 was not considered essential as there seems to be material that is necessary for Controls, such as Laplace transforms.
- Burden responded that it was his understanding that Laplace transforms were covered enough in EE 242 and EE 342 and that those courses would be sufficient.
- Chen suggested that EE 233 was the best course for coverage of Laplace transforms
- Discussion ended with Arabshahi recommending the Controls group review the MCDs for EE 242 and EE 342 to make sure the desired material was covered.
- Burden told the committee he will touch base with faculty for more information.
EE 242 & EE 342 provide required background and will still be essential.