

# ECE Undergraduate Electives Committee Meeting

## Monday, May 6th, 2024

**Attending:** Arabshahi, Gadre, Hwang, Lin, Lister, Makhsous, Overly, Swanson, Wilson

**Minutes of April 15th, 2024: APPROVED**

### **Agenda:**

1. Advanced Photonic & Electronic Devices Group Undergraduate Courses Review (Wilson)
2. Controls Group Undergraduate Courses Review (Makhsous)

### **Advanced Photonic & Electronic Devices Group Undergraduate Courses Review (Wilson)**

Wilson presented a review of undergraduate offerings of courses under the Advanced Photonic & Electronic Devices curriculum group:

([See Slides](#))

- 4XX Courses are cross-listed with graduate sections with enrollment being relatively stable and viable.
- 3XX Courses
  - Enrollments in both 331 and 361 have been dropping
    - EE 331:
      - While enrollments have dropped, they are still at healthy levels
    - EE 361:
      - Enrollments have become low, but there are faculty currently revising the 4XX EM courses which will hopefully bring some enrollment back to the course.
- ABET Outcomes:
  - EE 482 has had outcome issues for past few years that need to be addressed.
  - Photonics courses had one poor showing in 2020-2021, but was addressed and have been good since then.
  - EE 484 was removed as a capstone course and now runs as a standard offering. Amount of content was too great, so design aspects no longer part of the course.
    - Special optional project section was offered in Spring 2023, which worked but did not decide to offer it for Spring 2024
- Issues:
  - EE 280 is a course that is still in flux and being refined. Was designed to take some of the material from EE 331, which has not yet been revised accordingly.
  - EE 331 needs to be adjusted so there is no longer such strong overlap with EE 280 on certain topics.
  - Physics from PHYS 122 needs a lot of recap in our offerings as students are either not remembering the necessary material, or are not getting it well to start with.

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### Controls Group Undergraduate Courses Review (Makhsous)

([See Slides](#))

Makhsous presented a review of undergraduate offerings of courses under the Controls curriculum group:

- Currently, there are very few offerings from the Controls group
- EE 399: Intro to Robotics
  - Offered as a special topics offering for the second time this spring.
  - Successful at 30 students with a waiting list.
  - Looking to make it a permanent course, and increase enrollment to about 40-45
  - Some discussion of offering twice a year.
- EE 445:
  - Will be covered by the data science group as it is part of both the Controls and the Data Science pathways, and is taught by Fazel who is helping compose the presentation for the SIP/Data Science group.
- EE 447:
  - Two offerings per year.
  - Enrollment has been continuously healthy.
- End of Course reports now all submitted
- The group is looking to bring back EE 448, and possible EE 449, though not as capstone courses.
- ABET Outcomes:
  - Generally satisfactory, though a concern in Autumn 2023.
- Course evaluations have been generally good, though it would be good if Burden could get response rate up in his offering of the course.